

SITE NAME/TOD4_	MANSFIELD	PRODUCTS CO.	250504
CASE NUMBER			
SAMPLE #/STATIO	N LOCATION_	51	
SAMPLING DATE_	9-25-90	SAMPLING TIME	1630
•	AFFIC NUMBER TRAFFIC NUMBER	E HQ 42 ME HA 35	
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132676	W020/0/3
120 ml	VOA	1 77	1. 1
802	EXT	78	0157043
Boz	MET	1 V 79	
			-
PHYSICAL DESCR	IPTION AT TIME OF	F COLLECTION:	The same with the
	ED. BROWN		
PHYSICAL CHANG	ES FROM TIME OF	COLLECTION UNTIL SHIPMENT:	NON E
INSTRUMENT REA	DINGS	1/0	
COMPUTATIVITY	/ ₋	1//-	
CONDUCTIVITY			····

SITE NAME/TODA_	MANSFIELD	PRODUCTS CO.	021.121
CASE NUMBER	14960		· ·
SAMPLE #/STATIO	N LOCATION_	52	
SAMPLING DATE_	9-25-90	SAMPLING TIME	1230
ORGANIC TRA	FFIC NUMBER	E HQ 43	
I NORGANIC T	RAFFIC NUMBER	ME HA 36	•
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132680	W020/0/3
120 ml	VOA	81	
8 02	EXT	82	0157043
802	MET	83	
	1		-
	1		
PHYSICAL DESCR	IPTION AT TIME OF	COLLECTION: SILTY	CAND + GRAVEL
			
DIVETON CHANG	es sign trus os a	MILEOTION 1471 ANDRES	
PHISICAL CHANG	E2 FKM TIME OF C	COLLECTION UNTIL SHIPMENT	NONE
		·	
INSTRUMENT REA	DINGS		
Н	Λ/	//	•
CONDUCTIVITY	11/	H	
TEMPERATURE		•	

SITE NAME/TODA_	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE #/STATIO	N LOCATION	.5 3	
SAMPLING DATE _	9-25-90	SAMPLING TIME	1400
ORGANIC TRA	FFIC NUMBER	E 40 44	
I NORGANIC T	RAFFIC NUMBER	ME HA 36	•
			.*
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA		W0201013
120 ml	VOA		1 2
80Z	EXT		0157043
802	MET		V
			-
	 		
PHYSICAL DESCR	IPTION AT TIME OF	COLLECTION:	
PHYSICAL CHANG	ES FROM TIME OF O	OLLECTION UNTIL SHIPMEN	T: NONE
			
INSTRUMENT REA	DINGS	/	
рн	A-	/n	•
CONDUCTIVITY	/V /	'.17	
TEMPERATURE	/	· 	

SITE NAME/TODA_	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE #/STATIO	N LOCATION_	54	
SAMPLING DATE _	9-25-90	SAMPLING TIME	1445
ORGANIC TRA	FFIC NUMBER	EHQ 42	·
I NORGANIC 1	RAFFIC NUMBER	ME <i>HA</i> 35	•
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132688	W020/0/3
120 ml	VOA	89	1. 2
80Z	EXT	90	0157043
802	NET	1 91	1 1
	1	1	-1
	L		
	1		
	<u> </u>		
PHYSICAL DESCR	IPTION AT TIME OF	COLLECTION: BROWN	J MUD
DUVETON CHANC	es com tipe os o	ALLECTION INCTA CHANGE	· · · · · · · · · · · · · · · · · · ·
PRISICAL CHARG		OLLECTION UNTIL SHIPMENT	MONE
	<u>-</u>		
INSTRUMENT REA	DINGS		
pH	A	1.	•
CONDUCTIVITY	///	A	
TEMPERATURE	7		

SITE NAME/TODA_	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE #/STATIO	ON LOCATION_	<u> </u>	
	<i>a</i> 2 <i>a</i> 2 <i>a</i>	C. 110. 210. 210. 2	
SAMPLING DATE	7-25-90	SAMPLING TIME 15.2	<u> </u>
ORGANIC TRA	AFFIC NUMBER	E 4946	,
·	TRAFFIC NUMBER	ME HA 39	
			•
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132692	w0201013
120 ml	VOA	93	1. 2.
80Z	EXT	94	0157043
80Z	MET	1 95	1 1
	1	-	
PHYSICAL DESCR	IPTION AT TIME OF	COLLECTION: SAND	
			
PHYSICAL CHANG	ES FRON TIME OF CO	DLLECTION UNTIL SHIPHENT:	JONE
INSTRUMENT REA	NOIKGS		
рH	A	/	
CONDUCTIVITY	/V_/	H	
TEMPERATURE	/	•	

SITE NAME/TODA_	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE #/STATIO	N LOCATION	56	
SAMPLING DATE	9-25-90	SAMPLING TIME	1230
			·
ORGANIC TRA	AFFIC NUMBER	E HQ 47	٠
I NORGANIC	TRAFFIC NUMBER	ME 11A 40	•
			٠
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUHSER
120 ml	VOA	132696	W0201013
120 ml	VOA	97	1. 1.
80Z	EXT	98	0157043
208	MET	99	
•			-
	1		1
	<u> </u>		
	<u> </u>		
PHYSICAL DESCR	IPTION AT TIME OF	COLLECTION:	
		····	
			·
PHYSICAL CHANG	ES FROM TIME OF C	COLLECTION UNTIL SHIPMENT	NONE
	·		
			·
INSTRUMENT REA	DINGS		·
Н	A-f	/	·
CONDUCTIVITY	/V_/	<u>/ </u>	
TEMPERATURE	· /		

SITE NAME/TODA_	MANSFIELD	PRODUCTS CO.	
CASE NUMBER _	14960		
SAMPLE #/STATIO	N LOCATION_	≤7	
SAMPLING DATE_	9-25-90	SAMPLING TIME / 3	800
	·		- •
•	FFIC NUMBER	E HOY8	
I NORGANIC T	RAFFIC NUMBER	ME HA 41	
		•	_
80TTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	1327.00	W0201013
120 ml	VOA	6/	1. 2
80Z	EXT	02	0157043
802	MET	0.3	1 1
	ĺ	Į.	-
	ļ		
DUYCICAL OCCODE	INTION AT THE OF	COLLECTION DOLL	
		COLLECTION: DRY ORGA	ANIC RICH
CHOCCATE	COLORED	70 P. SOLL .	·
DIVICTO AL CULLIA	CO CO CO TIME OF	0011 F07104 14 271 0424 04	
PHISICAL CHANG	ES FRUM TIME UP (COLLECTION UNTIL SHIPMENT:	NONE
		·	
INSTRUMENT REA	ntycs		
by the state of th		1	
CONDUCTIVITY		TA	· · · · · · · · · · · · · · · · · · ·
TEMPERATURE		//	
ICHPERMIUNE			

SITE NAME/TODA_	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE #/STATIO	ON LOCATION	58	
•			
SAMPLING DATE	9-25-90	SAMPLING TIME	1330
	·		. "·•
ORGANIC TRA	AFFIC NUMBER	E 4Q 49	
INORGANIC	TRAFFIC NUMBER	ME 11 4 4 2 .	
		•	
		•	_
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUHBER
120 ml	VOA	132 704	W0201013
120 ml	VOA	05	<u> </u>
8oz	EXT	06	0157043
802	MET	0.7	1 1
	1		-1
	1		
	1		
	<u> </u>		
PHYSICAL DESCR	IPTION AT TIME OF	COLLECTION: VERY DE	PRK , BROWN
TO BLAC	K SOIL, WI	TH SOME SAND +	GRAVEL
PHYSICAL CHANG	SES FROM TIME OF C	OLLECTION UNTIL SHIPMENT:	NONE
	·		
INSTRUMENT REA	ADINGS:	·	
pH '	A f	/ <u>^</u>	•
CONDUCTIVITY	/V_/	<u>'. []</u>	
TEMPERATURE	/		

SITE NAME/TODA_	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE #/STATIO	N LOCATION_	59	
SAMPLING DATE_	9-25-90	SAMPLING TIME_	1330
ORGANIC TRA	FFIC NUMBER	E 49 50	
•	RAFFIC NUMBER	ME HA 43	
,		•	
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUHSER
120 ml	VOA	132. 708	W0201013
120 ml	VOA	1 1 09	1 2
80Z	EXT	10	0157043
802	MET	1 1/1	1 1
			· -
	<u> </u>		
	L		
		COLLECTION: SANDY	
TO BLACK	SOIL WITH	1 SOME SILT + G	RAVEL
PHYSICAL CHANGE	ES FROM TIME OF (COLLECTION UNTIL SHIPMENT:	NONE
·	·		
	·		
INSTRUMENT REAL	DINGS	- 1	
рН	A(/	
CONDUCTIVITY	/V	/H	
TEMPERATURE		•	

ENVIRONMENTAL PROTECTION AGENCY

REGION 5
230 South Dearborn Street
Chicago, Illinois 50604

Chicago, Illinois 60604 CHAIN OF CUSTODY RECORD FROJ. NO. PROJECT NAME COOLER FOHD532 CASE 14960 F05-9001-017 NO. SAMPLERS: (Signature) OF. REMARKS CON-TAINERS LUW CUNCENTRATION STA. NO. DATE TIME STATION LOCATION TAG NUMBERS MATRIX. 3 132676-78 EHQ 42 17-25-90 1630 5016 132680-82 SOIL FHO 437-25-901230 132684-86 SOIL S 53 EHO 449-25-90 1400 132688-90 54 EHO 45 9.25.70 1445 - 501L 132692-94 SOIL EHO 468-25-901520 132696-98 EHO 17 P.25.90 1230 SOIL 501L 132700-02 EHO 487.25.90 1300 132704-06 EHN 497.25.90 1330 SUIL 13 2708 -10 EHQ 50 925.90 1330 SOIL LOT#: 120m/: 60201013 802:0157043 OTK IN CUSIER Relinquished by: (Signature) Date / Time Received by: (Signature) Relinquished by: (Signeture) Date / Time Received by: (Signature) 9-25-90 1830 Relinquished by: (Signeture) Received by: (Signature) Date / Time Relinquished by: (Signature) Date / Time Received by: (Signature) Remarks SHIPPED FEDEX TO ENCOT Relinquished by: (Signature) Date / Time Received for Laboratory by: Date / Time (Signature) AIRBILU # 9157647284 CUSTODY SEALS! 129244, 129245 Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

	PO Box 818 Alexa 703-557-2490 F	andria, VA 22313 FTS 557-2490	(For CLP Use Only)	4960 10/14
Type of Activity (Check one)	2.	. Region Number Sampling Co.	4. Date Shipped Carrier 5. Sample Descri	ption (Enter in Column A)
ENF NPLD RA SSI		<u> </u>	9025-90/ 1. Surface	
│□ER ┆□O&M □RD □'ST (│□ESI □,PA □RIFS □STP,		Sampler (Name) 5 CM	Airbill Numbers 4 7 7 9 5 3. Ground 3. Leachate	
Non-Superfund Program	3 3.	Ship To: A	Double volume required for matrix 4. Rinsate	
34	in the second	SHIP TO: ANTONIA BENNEY SKINNER + SHERMAN	spike/duplicate aqueous sample? 55. Soil/Sed	
Site Name		300 SECOND AVE	Ship medium and high concentration 7. Waste (S	
Site Name MANSFIELD PROD City, State	VC75 CO.	WALTHAM, MAZOZ 354	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	AS) (Specify)
City, State	Site Spill ID		See reverse for additional instructions.	A The state of the
MANSFIELD, OH	(0)	(D) 3 4 3 4 6 2		2 R 6 Q
(A) (B)	(C)	(D) Francis (E) Francis	(G) (G) (H)	一級美國教育 经股票债券 化氯甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基
CLP Sample Concen- Sample Descrip- tration	List	Low Conc.		
Number tion L=low	Preserv-	Special Special	Station Date/Time of Corresponding Sample Collection Sample	
(From labels) (From M=med box 5) H=high	Preserv- ative Used/Vol	Nitrate/ Nitrate/ Nitrite Nitr		
4 2		SE E E E	- 「	
MEHA 35 5 L			5/ 928901630 EHQ42	
NEHA 36 5 L			25901230 EUDS43	
MEHA 37 5 L		W AM THE	539 92590 1400 CUD 44	Harry Market
MEHA 38 5 L			SY 9.3.901445 E40 45	X733 300-10-0 10-0-0-0 10-0-0-0 10-0-0-0 10-0-0-0 10-0-0-0 10-0-0-0 10-0-0-0 10-0-0-0 10-0 10-0-0 10-
MEHA 39 5 L		X - 1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	55 9725.90 KDO FHO 96	
MEHA 40 5 L		X tie sign	562 172590 1230 EHQ 47	
MEHA 41 5 L			578 9725.901300 EHO 40	
MEHA 42 5 L			58 93901330 EHQ 49	
MEHA 43 5 L.		XIVI	59 9.25.90 1330 EHQ 50	
44 SK	S 1813 1	W. 二人 新		
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		SHIPPLE :	6 9 9 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	366.7
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MENVIRONMENTAL PROTECTION AGENCY Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD PROJ NO. PROJECT NAME COULER # FOHO 532 | FOS- 9001 - 017 CASE \$14960 NO. SAMPLERS: (Signature) OF REMARKS CON-**TAINERS** LUW CONCENTRATION STATION LOCATION STA. NO. DATE TIME TAG NUMBERS MATRIX 32679 MEHA35 19-25-90/63/ 5011 HEHA 31.9-25-901230 <016 MEHA 379-15-90 1400 MEHA 38 9-15-90 1445 .. 5011 ME HA 29 9-25-9 الأثاك 326 99 MEHA 401-25-901230 5011 30707 MEHA 4117-2590 1300 5011 Melin 42 9-2520 1330 32 707 MENA 43 9.25.96 1330 5011. LOT#: 802: 0/57043 ITR IN CODIER Relinquished by: (Signature) Relinquished by: (Signature) Date / Time Received by: (Signature). 6 65 Date / Time Received by: (Signature) 9-25-90 | 1830 Relinquished by: (Signeture) Received by: (Signature). Relinquished by: (Signature) ⊘ Date / Time Received by: (Signature) Date / Time Remarks SHIPPED FED EX TO SKINNER Relinguished by: (Signature) Date / Time Date / Time Received for Laboratory by: (Signature) AIR BILLS# 9157647295 Distribution: White - Accompanies Shipment; Pink - Coordinator Field Files; Yellow - Laboratory File CUSTODY SEALS 120005, 128886

SEPA	Cont	United St tract Laborat PO I 7	tates E tory Pr Box 81 03-557	nvironr ogram 8 A -2490	nental Sa lexand FTS	Protec mple N ria, VA 5 557-2	tion Agency Management (22313 490	Office		Org	ganic (For C	Traffic LP Use	Re Only,	port	Cas	960 1960) SAS	No. (if appli	icable)	
Type of Activity (C			,		2. R	egion	Number Sam	pling Co.		ate Shir	oped Car	4. 6	(C) =1	5. Sample	•	-	in Colur	nn A)		1
☐ ENF ☐ NPLD ☐ ER ☐ O&M		⊠sı 🗀 : □st 🗀 :		(Specify	/) Sam	pler (N	lame)	77.		ili Numi		5 To 5	<u>(g</u>	1. Surfa 2. Grou	ice Wai ind Wai			•		
ESI PA		STPA		, 0 ,000,1,		ED	KARE	CKI			$(0 \le 2)$	<i>'284</i>	* \$	3. Leac	hate	() ()	31 -1	90.	ります。	
Non-Superfund Pro	gram	\$ P &	-		3. S	hip To:	T DEWA	31.5	Triple	e volun	e required	for matrix us sample.	行がた	5. Soll/	Sèdime	n 6 9		- ~ 5 5	(pr %)	
Site Name					EN	V. C	ONTROL	TEC	H S	o/oupile 世 樂	SE W	가 용 은 na adubia	20 1	6. Oil (BAS) e (SAS) }	<u>.</u>		3	ì
MANSFIELD	PROD	VCTS (cò.	·]3	985	ONTROL RESEAR	CHPRI	Ship sam	mediu ples in	mand hig paint cans	h concentra k g 🙀	ation⊣ CC 6.L	8. Othe	r (SAS	(Specif	y)		188	
City, State 11 ANSFIE	CD, 01	H	Site	Spill II	PAI	VN	ARBOR,	MI 4,	8/08 See	reverse	for additi	onal Instruc	ctions.	IF VOA S	AMPLE C WIT	PRESER H Y OR N	VED IND	ICATE IN		
CLP	(A) Sample Descrip-	(B) Concen- tration		RAS A	C) = nalysis		CE (D)		(E)	$m \gtrsim 3$	1 8 8	3 0 3	S. Co	(G) orrespondir	10	Č.				
Sample Number (From labels)	tion (From box 5)	L=low M=med H=high	VOA	BNA	Pest/ PCB	ARO/ TOX	Speci Speci Handli	al 등 등 ng를 받는	Stati Local	ion (. Sa	Time of a simple o	CI Fin	P Inorgan Sample Number	ic		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		•	
EHQ: 42	5	L	N	X	X		arth y	Š	3/29	7. U.S.	9-25-90	0 163c	ME	HA 35	<u>.</u>	# 1. [(.)		· - 1 - 2 - 2 - 2 - 1	٠.,	
_ EHQ 43	L 5		N	X	X	300	8 0 8 8 8 8 8		Sã	18 85	9-25-9	6 1238	ME	HA 3	ر ا	4			-	l
EHD 44	5	L :	N	X	X		aithe Bloc Sm		"SE?	33-1	(4) 14	0 1400	5000		7	1 ; 321		" 集为		ı
EHQ 45	5	- L	N	X	X		9 9 6	1 22	آچ ۽	/ 5	l' L ·	0 1445	3.35	· · · · · · · · · · · · · · · · · · ·	8/2	§* ±.	· '/;			ı
EHQ 46	5	1.1	N'	X	×	-	美麗樹	- 3	55	** ***	0 500	10 A = 3	ΠE					e.		į
PHO 47	5	1.1	1	X	X		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	老	56		Fr. 17	901230	7	EHA 4		y c	!	11 11 mag ta	- (#. 14)	
EHQ 48	5	123	11	X	X		n g	53.7	\$7			10 130		EHA	//				•	l
EHQ 49	5	7	1.7	X	X		ESTATE OF THE COLUMN TO THE CO	. 8	82			0 1330	1		12	<u>}</u>			. :	
31 3 5		1	N	Y	(X)	4.	S 0 %		59		2 1	96 33c			A	į		Ř	1 (1 2) 	
EHQ 50	7 -		1/	1		Ì	10 W 8	- 55° - 55° - 53°	3/	. A	7-23	Gi:	1 7	EHA 4	اك	i,	1	•		
ACT.	 	- 6 G	<u> </u>	- 1	184 L	 	on the property of the propert	- 1. <u>1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1</u>	574 44	4- 1			1 8			Ä) .; · r}		: •	
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7.83

IT BAMPLE PROPOBAL FORM REGION V

BITE NAME (PHINI) TEAM LEADER LAXY	Milkshield Thulund	10252 TDD#	110554 TDD#105-10017 EPA 1.D.# OHD 000723601 GITY ALTH CELL BENT TO HECC	1211 EPA I.D	р. # <u>2/1/2 000 7</u> / то нвсс	723601. BTNTE (2) (LLZ	l al l
**************************************	19 60 DRINKING	**************************************	**************************************	***************************************	****** DNI	**************************************	* 2 2 2 2 2 2 2 2 2
ROUTINE ANALYT LOW WATERS I FRACTION VOA PANS	ROUTINE ANALYTICAL SERVICES (RAS) LOW WATERS MONITORING WELLS FRACTION NUMBER OF FIELD VOA ABNS	EXPECTED DATE TO BAMPLI	LABORATORY NOME	NUMBER OF COOLERS DHIPPED	NUMBER OF SAMPLES BHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
PEST/PCB METALS CN	A CARLO CARROLLE CONTRACTOR CONTR						
* *	######################################	**************************************	**************************************	**************************************	NUMBER OF SPAPLES SHIPED	**************************************	######################################
PESI/FCR METALS CN							
**************************************	**************************************	**************************************	**************************************	**************************************	**************************************	**************************************	******* DATE SHIPPED TO LAB
T/PCB ALS ****		15. P. ofw	10 > EV		*******	**************************************	***********
RESIDENTIAL/ MUNICIPAL WELL LOW DETECTION LIMITS/FAST FRACTION SAMPLES+	WATERS (DRINKING WATER TURN ARDUND OF FIELD BLANKS+ DUPLICATE= TOTA	BAMPLES) EXPECTED DATE TO L SAMPLE	LABORATORY NAME	NUMBER OF COOLERS SHIPPED	NUMBER OF SAMPLES SHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
ABNS PEST/PCB METALS CN				## 100 mm m m m m m m m m m m m m m m m m			
# S US	I SEE NEXT PAGE FOR SPECIAL ANALYTICAL	BERVIC	BERVICE REQUEST FOR THIS SITE	BITE			

Cerpernady

SAMPLER CHECKLIST ALL LOW CONCENTRATION SAMPLES

Site Name MANSFIELD PRODUCTS

All the be	low procedures have been followed and all coolers properly
packaged f	or shipment.
calle	and Jung much
Sampler Si	gnature Team Leader Signature
<u>/</u> 1.	Is date shipped filled in on the OTR/ITR?
<u>/</u> 2.	Is date and time of sample collection (Letter "F) filled in
	on the OTR/ITR?
	Has either Shipment Complete or Shipment Not Complete been
/	marked on the OTR/ITR?
4.	On the C.O.C. form, is PAN in project no.; TDD/Case/SAS (if
	applicable) in project name for CLP and site name/case for
<i>;</i>	CRL?
<u>√</u> 5.	Are all dates and times on the C.O.C. form?
<u>√</u> 6.	Has either grab or composite sample been marked on the
/	C.O.C.?
<u>7</u> .	Is the matrix filled out on each line of the C.O.C. form?
,	(i.e., Soil, Water, Drinking Water) DO NOT USE ARROWS.
<u>√</u> 8.	Is the Cooler # written on top of the C.O.C. form?
<u> </u>	Is it referenced on the C.O.C.s which cooler # the OTR/ITR or
<i>j</i>	the CRL tracking forms are in?
10.	Are relinquish date, time, and signature on the bottom of the
/ .	C.O.C.?
<u>/</u> 11.	Is there one C.O.C. per cooler?
<u>/</u> 12.	Has the proper paperwork been put in a plastic bag and taped
	to the inside of the cooler lid?
	o C.O.C Send white copy, bring back pink and yellow.
	o OTR/ITR - Send white and yellow copies and bring back
	blue/green and pink.
	o CPI tracking forms - send all of them

13.	Is sample number, date, and time of collection permanently
	labeled on each sample bottle?
14.	Are samples packaged in such a way to prevent breakage?
15.	Have photographs been taken of each cooler showing ice,
	custody seals, and paperwork?
_ 16.	Are the coolers acceptable at Fed Ex?
	o Condition
	o Drain plug taped
/	o Correctly labeled with address stickers
/ 17.	Are you sending the coolers to the correct lab? Are you
	using the correct lab acronym?
18.	Did you call the SMC before 10:00 a.m. on the day after the
	comple shipmont?

ONLY APPLIES TO WATERS

 1.	on the UTR/1TK forms,	is the Sample Blank marked rinsate (4)
	in sample description	(Letter "A").
 2.	For monitoring wells, 1	has it been stated on the bottom of the
	inorganic C.O.C. whether	er the metals were filtered or not?
 3.	On the OTR/ITR forms,	"blank" should be written under special
	handling (Letter "D") a same location.	and on OTR, MSD should be marked in the
 4.	Have the preservatives bottle volume?	been written on the C.O.C. next to the
	HNO ₃ for Metals	$K_2Cr_2O_7$, +HNO ₃ for Hg
	NaOH for CN	HCL for VOA
 5.	Are sample water levels sample bottles except	s marked with a grease pencil on all

SITE NAME/TODY_	MANSFIELD	PRODUCTS CO.	<u> </u>
	14960		
SAMPLE #/STATIO	ON-LOCAT-10N	5/	
SAMPLING DATE	9-25-90	SAMPLING TIME_	1630
ORGANIC TRA	AFFIC NUMBER	E HQ 42	•
-	TRAFFIC NUMBER	ME HA 35	
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132676	W020/0/3
120 ml	VOA	1 77	1. 1
802	EXT	78	0157043
802	MET	1 V 79	1 1
			-
	<u> </u>		
		1	
	i	i	İ
	1		İ
PHYSICAL DESCR	IPTION AT TIME O	F COLLECTION:	
_	ED, BROWN		
		·	
PHYSICAL CHANG	ES FRON TIME OF	COLLECTION UNTIL SHIPMENT:	· ····································
			<u> </u>
INSTRUMENT REA	ADINGS	/	
pH		1 / 1	
CONDUCTIVITY	/t	1/17	
TEMPERATURE			

SITE NAME/TODA	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE 1/STATIO	N-LOCATION	-52	the time of the state of the st
SAMPLING DATE	9-25-90	SAMPLING TIME	1230
_		:	
•	AFFIC NUMBER TRAFFIC NUMBER	E HQ 43 ME HA 36	
INORGANIC	IKAPPIC NUMBER	11 11 15 10 10 10 10 10 10 10 10 10 10 10 10 10	•
			. • •
80TTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132680	W020/0/3
120 ml	VOA	81	1. 1
8 02	EXT	82	0157043
802	MET	83	1 1
			-
	ļ		
			ļ
	!		
PHYSICAL DESCR	THE OF	COLLECTION: SILTY	CAND + GRAVEL
		•	
DINCTON CHANG	SE COM TIVE OF	**************************************	
SHISTCAL CHANG	E2 LKOU LIWE OF (COLLECTION UNTIL SHIPMENT:	NONE
			
INSTRUMENT REA	nings		
pH Hq		/	
CONDUCTIVITY	11/	<i>H</i>	
TEMPERATURE			······································

SITE NAME/TODA_	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE //STATIO	N-LOCATION-	3	top will make the control of the property about the shape Belletin for the control of the contro
SAMPLING DATE _	9-25-90	SAMPLING TIME	1400
ORGANIC TRA	FFIC NUMBER	Е Но ЦЦ	•
•	RAFFIC NUMBER	E HQ 44 ME HA 36	•
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA		W020/0/3
120 ml	VOA		1. 2
80Z	EXT		0157043
802	NET		1
			-
		<u> </u>	i
		i _	j j
PHYSICAL DESCRI	PTION AT TIME OF	COLLECTION:	
PHYSICAL CHANGE	S FROM TIME OF CO	CLECTION UNTIL SHIPMENT	· NONE
			1000
INSTRUMENT REAL	 DIKGS		
рН	<u> </u>	/	
CONDUCTIVITY	\/ /	A	
TEMPERATURE		•	

SITE NAME/TODA_	MANSFIELD	PRODUCTS CO.		
CASE NUMBER 14960				
SMPLE #/STATIO	N LOCATION_	54	AND METERS OF THE PROPERTY OF	
SAMPLING DATE_	9-25-90	SAMPLING TIME	1445	
ORGANIC TRA	FFIC NUMBER	EHQ 42		
•	RAFFIC NUMBER	MEHA35		
		•	. م	
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER	
120 ml	VOA	132688	W020/0/3	
120 ml	VoA	89	1. 2	
80Z	EXT	90	0157043	
802	NET	1 9/	1	
\			-	
			<u> </u>	
			1	
PHYSICAL DESCRI	PTION AT TIME OF	COLLECTION: BROWN	MUD	
		·	· .	
		<u> </u>		
PHYSICAL CHANGE	S FROM TIME OF O	OLLECTION UNTIL SHIPHENT:	NONE	
•	•	·	······································	
INSTRUMENT READ	INGS	-/		
рн	A-	/a		
CONDUCTIVITY	/V_/		····	
TEMPERATURE	/	•		

SITE NAME/TODE_	MANSFIELD	PRODUCTS CO.			
CASE NUMBER	ASE NUMBER 14960				
SAMPLE F/STATIO	N EOCATION_		Secretary of the Control of the Cont		
SAMPLING DATE	9-25-90	SAMPLING TIME /	1520		
ORGANIC TO	FFIC NUMBER	E 4946			
•	RAFFIC NUMBER	ME 11 A 39			
•			. • .		
BOTTLE	AMALYSIS	TAG NUMBERS	LOT NUHSER		
120 ml	VOA	132692	W020/0/3		
120 ml	VOA	93	1 1		
80Z	EXT	99	0157043		
208	NET	95	<u> </u>		
	! 1		-1		
	1				
	<u> </u>				
PHYSICAL DESCR	IPTION AT TIME OF	COLLECTION: SAND			
DUYSTCAL CUARC	ES SDOW TIME OF CO	OLLECTION UNTIL SHIPHENT:			
raistor come	-	ACCEPTION OUT OF SELECTION	NONE		
INSTRUMENT REA	DIKGS				
Н	·	/ _A	·		
CONDUCTIVITY	/V /	П			
TEMPERATURE	/				

SITE HAME/TODA_	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE 1/STATIO	N LOCATION		
SAMPLING DATE _	9-25-90	SAMPLING TIME	1230
ORGANIC TRA	FFIC NUMBER	E HQ 47	
I NORGANIC T	RAFFIC NUMBER	ME /1 A 40	•
•			
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132696	W0201013
120 ml	VOA	97	1. 1
8oz	EXT	98	0157043
802	MET	99	1 4
		1	-
		f	1
<u> </u>			<u> </u>
	·		
PHYSICAL DESCRI	PTION AT TIME OF	COLLECTION:	
		•	
			•
PHYSICAL CHANGE	S FROM TIME OF O	OLLECTION UNTIL SHIPHENT:	NONE
	•		
INSTRUMENT REAL	DINGS		
На			
CONDUCTIVITY	/V /	H	
TEMPERATURE	/	•	

SITE NAME/TODA	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE T/STATIO	N LOCATION_	57	
SAMPLING DATE	9-25-90	SAMPLING TIME	1300
ORGANIC TRA	AFFIC NUMBER	E HQ48	
•	TRAFFIC NUMBER	ME HA Y/	-
		,	
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NURSER
120 ml	VOA	132700	W0201013
120 ml	VOA	61	1 2
80Z	EXT	. 02	0157043
208	MET	0.3	1
	<u> </u>		
PHYSICAL DESCR	IPTION AT TIME OF	COLLECTION: DRY O	REANIC RICH
		of soil.	·
		· · · · · · · · · · · · · · · · · · ·	
PHYSICAL CHANG	ES FROM TIME OF O	OLLECTION UNTIL SHIPHENT	NONE
	·		
	····		
INSTRUMENT REA	OINGS		
pH		/a	
CONDUCTIVITY	/V_/	[]	
TEMPERATURE	/		

SITE NAME/TODA_	MANSFIELD	PRODUCTS C	:0.	
CASE NUMBER	14960			
				
SAMPLE TISTATIO	N LOCATION	58		a - may have a superior and a superi
				
SAMPLING DATE _	9-25-90	SAMPL	ING TIME	: /330
•	FFIC NUMBER	E 4Q 49		
I NORGANIC T	RAFFIC NUMBER	ME HA 42	. ·	•
	1 4	1740		1 sat whose
BOTTLE	ANALYSIS	TAG NUMBER		LOT NUMBER
120 ml	VOA	1 /32		<u> </u>
120 ml	VOA		05	· · · · · · · · · · · · · · · · · · ·
80Z	EXT		06	0157043
80Z	MET		_07_	<u> </u>
		1		-
		ļ		
	<u> </u>			
`				DARK , BROWN
TO BLACE	K SOIL , WI	TH SOME	SAND	+ GRAVEL
				
PHYSICAL CHANGE	es from time of o	OLLECTION UNTIL	. SHIPHE	HT: NONE
	-	· · · · · · · · · · · · · · · · · · ·		
				·
INSTRUMENT REAL	DINGS			
Hq	A-	/a		
CONDUCTIVITY	/V_/			
TEMPERATURE	/	. •		

SITE NAME/TODA_	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE #/STATIO	N LOCATION	5-9	· · · · · · · · · · · · · · · · · · ·
SAMPLING DATE_	9-25-90	SAMPLING TIME	1330
OOCANIC TOA	FFIC NUMBER	FUN SA	
•	RAFFIC NUMBER	E HQ 50 ME HA 43	
		<u>.</u>	
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132. 708	W0201013
120 ml	VOA	1 09	<u> </u>
80Z	EXT	1 10	0157043
802	NET	1 1/1	1 1
			-
	L		
1			
04461011 055001	LOTTON AT THE OF	COLLECTION	200
	•	COLLECTION: SANDY	
TO BLACK	SOIL WITH	SOME SILT + G.	RAVEC
DUNCTON CUANO	C COOL TIVE OF		
PHYSICAL CRANG	:2 FROM - LIME OF (COLLECTION UNTIL SHIPMENT:	NONE
		·	
INSTRUMENT REAL	29810		
pH pH		1	•
CONDUCTIVITY	<u>-</u>	/A	
TEMPERATURE			· · · · · · · · · · · · · · · · · · ·

SITE NAME/TODA_	MANSFIELD	PRODUCTS CO	
CASE NUMBER	_	,	
SAMPLE #/STATIO	N LOCATION	51	
	9 20 -		
SAMPLING DATE_	7-25-90	SAMPLING TIME	1630
ODEANIC TO	AFFIC NUMBER	E HQ 42	
•	TRAFFIC NUMBER	ME HA 35	
2110110111120			
	• .		
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132676	W0201013
120 ml	VOA	1 77	1 1
802	EXT	1 78	0157043
802	MET	V 79	
			-
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BUYCECAL BCCCO	INTION AT TIME O	E COLLECTION.	
PHISICAL DESCR	IPTION AT TIME O	r collection:	
			
PHYSICAL CHANG	ES FROM TIME OF	COLLECTION UNTIL SHIPMENT:	16011 =
THIS TOPE CHANG		The state of the s	
	······································		
INSTRUMENT REA	DINGS		
рн	1	1/4	
CONDUCTIVITY	70	////	
TEMPERATURE		•	

SITE NAME/TODA_	MANSFIELD	PRODUCTS CO.	414
CASE NUMBER	14960		
SAMPLE #/STATIO	N LOCATION_	52	
SAMPLING DATE_	9-25-90	SAMPLING TIME_	1230
ORGANIC TRA	FFIC NUMBER	E HQ 43	
I NORGANIC T	RAFFIC NUMBER	MEHA 36	•
		•	
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132680	w020/013
120 ml	VοA	81	1. 1
802	EXT	82	0157043
862	MET	83	
			-
			1
	<u> </u>		
PHYSICAL DESCRI	PTION AT TIME OF	COLLECTION:	
		· · · · · · · · · · · · · · · · · · ·	
·			
PHYSICAL CHANGE	ES FROM TIME OF C	DLLECTION UNTIL SHIPMENT:	NONE
	·		<u></u> `
·			
INSTRUMENT REAL	DINGS		
рН	A/_	/A	·
CONDUCTIVITY	/V/		<u></u>
TEMPERATURE	/_	·	

SITE NAME/TODA_	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE #/STATIO	N LOCATION_	s 3	
SAMPLING DATE_	9-25-90	SAMPLING TIME	1400
_	· .	_	- •
ORGANIC TRA	FFIC NUMBER	E 40 44	
I NORGANIC	RAFFIC NUMBER	ME HA 36	•
		•	
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA		W020/0/3
120 ml	VOA		1 1
80Z	EXT		0157043
802	MET		
	1		-
	<u> </u>		
PHYSICAL DESCR	IPTION AT TIME OF	COLLECTION:	
			· · · · · · · · · · · · · · · · · · ·
PHYSICAL CHANG	ES FROM TIME OF CO	DLLECTION UNTIL SHIPHENT	: NONE
·	· 		
INSTRUMENT REA	DINGS		· · · · · · · · · · · · · · · · · · ·
pH H	. ^	/	
CONDUCTIVITY	\	A	
TEMPERATURE		•	

SAMPLE #/STATION LOCATION	SAMPLING TIME_	1445
SAMPLE #/STATION LOCATION		1445
SAMPLE #/STATION LOCATION		1445
	SAMPLING TIME_	1445
2 - 1	_ SAMPLING TIME_	1445
SAMPLING DATE 9-25-90		-
ORGANIC TRAFFIC NUMBER	HQ 42	,
	EHA35	
,	-	
BOTTLE ANALYSIS	TAG NUMBERS	LOT NUHBER
120 ml VOA	1 132688	W020/0/3
120 ml VOA	89	1. 2
802 EXT	90	0157043
802 MET	1 9/	1 4
		-
<u> </u>		i
		i
PHYSICAL DESCRIPTION AT TIME OF CO	LLECTION:	
	•	•
PHYSICAL CHANGES FROM-TIME OF COLL	ECTION UNTIL SHIPMENT	NONE
•		
		
INSTRUMENT READINGS	-	
Н	^	•
CONDUCTIVITY	7	
TEMPERATURE	•	

SITE NAME/TODA	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE F/STATIO	ON LOCATION	<u>.</u> 55	
SAMPLING DATE	9-25-90	SAMPLING TIME	1520
ORGANIC TR	AFFIC NUMBER	E 4946	- - •
INORGANIC	TRAFFIC NUMBER	ME HA 39	•
BOTTLE	ANALYSIS	TAG NUMBERS	LOT HUHSER
120 ml	VOA	132692	W0201013
120 ml	VOA	93	1. 2
80Z	EXT	99	0157043
802	NET	95	1
			-
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PHYSICAL DESCR	IPTION AT TIME OF	COLLECTION:	
			
DUYCTCAL CUANC	ES COM TIME OF A	OLLECTION UNTIL SHIPHENT	
raistor Chan		accepton outle Sulkwent	NONE
INSTRUMENT REA	VOINGS		
рН		7,	
CONDUCTIVITY	<i>/\/ /</i>	M	
TEMPERATURE		•	

SITE NAME/TOD#_	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE F/STATIO	N LOCATION		
SAMPLING DATE	9-25-90	SAMPLING TIME	1230
ORGANIC TRA	FFIC NUMBER	E HQ 47	•
I NORGANIC T	RAFFIC NUMBER	ME 11A 40	•
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUHSER
120 ml	VOA	132696	W0201013
120 ml	VOA	97	1. 2
80Z	EXT	98	0157043
802	MET	1 99	
			-
			
!	·		
PHYSICAL DESCRI	PTION AT TIME OF	COLLECTION:	
	· .		
· · · · · · · · · · · · · · · · · · ·			
PHYSICAL CHANGE	S FROM TIME OF	COLLECTION UNTIL SHIPMENT	NONE
IKSTRUMENT REAL) IKGS	·	
pH		1	·
CONDUCTIVITY	/V	<u>/ M</u>	
TEMPERATURE	/	•	

SITE HAME/TODY_	MANSFIELD	PRODUCTS CO.	
CASE NUMBER _	14960		
SAMPLE #/STATIO	N LOCATION		
SAMPLING DATE_	9-25-90	SAMPLING TIME	1300
ORGANIC TRA	FFIC NUMBER	E HQ48	
•	RAFFIC NUMBER	ME HA 41	•
BOTTLE	AHALYSIS	TAG NUMBERS	LOT HUHSER
120 ml	VOA	132700	W0201013
120 ml	VOA	6/	1. 2
80Z	EXT	. 02	0157043
802	MET	0.3	1
		•	-
	· · · · · · · · · · · · · · · · · · ·		
PHYSICAL DESCRI	PTION AT TIME OF	COLLECTION:	
PHYSICAL CHANG	ES FROM TIME OF O	OLLECTION UNTIL SHIPHENT:	NONE
INSTRUMENT REAL	DIKES	·	
Н	A-f	ta	
CONDUCTIVITY	/V_/	(-[]	
TEMPERATURE	/		

SITE NAME/TODA_	MANSFIELD	PRODUCTS CO.	,
CASE NUMBER	14960		
SAMPLE #/STATIO	N LOCATION_	58	
SAMPLING DATE_	9-25-90	SAMPLING TIME /	330
ORGANIC TRA	FFIC NUMBER	E 4049	
•	RAFFIC NUMBER	ME HA 42 .	
	•	· `	
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132 704	W0201013
120 ml	VOA	05	1- 2
80z	EXT	. 06	0157043
802	MET	0.7	1 1
			-
	\		
			1
PHYSICAL DESCR	PTION AT TIME OF	COLLECTION:	
			·
PHYSICAL CHANG	ES FROM TIME OF CO	LLECTION UNTIL SHIPHENT:	ALGALE
THIS COLL WILLIAM			7020
INSTRUMENT REA	DINGS	1	
рH	A	/	•
CONDUCTIVITY	/V_/	П	
TEMPERATURE	1	•	

SITE NAME/TODE_	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE #/STATIO	N LOCATION	59	
CAUDI THE DATE	9-26-90	SAMPLING TIME	1330
SAMPLING DATE_	1-25-10	SAFEING TIME_	1320
ORGANIC TRA	AFFIC NUMBER	E 40 50	
I NORGANIC 1	RAFFIC KUHBER	MEHA 43	•
·		• <i>*</i>	
	•	.	
BOTTLE	ANALYSIS	TAG NUMBERS	LOT HUYSER
120 ml	VOA	132. 708	<u> </u>
120 ml	Vof	09	1. 2
8oz	EXT	1. 10	0157043
802	NET	1 1/1	1
	,		-
	<u></u>		
			•
	1		
PHYSICAL DESCR	IPTION AT TIME OF	COLLECTION:	
THISTORY DOOR			-
PHYSICAL CHANG	ES FROM TIME OF C	DULECTION UNTIL SHIPMENT	NONE
	- 		
			
INSTRUMENT REA	DIKES.	·	
pH	A-f	/A	
CONDUCTIVITY	/V_/	<u> </u>	
TEMPERATURE			

Isamemo

Mansfield Porducts / Karecki

DORGING Lent Licined 2 Soil
integral Volumes-MEHA 39
and META 41. Informed
Colfinda K. to analyge BOTH as
are eroginics.

Decan's at requested a

Copy of the OTR because they

Couldn't jead their copy.

Cross out "discolved" on metals

Column on ITR.

Reed Your Checklist and Sample description Jonns -also Neceipt for Jangles.

- Press lader organiverk

Thanks, L. Davis



United States Department of the Interior

FISH AND WILDLIFE SERVICE

ES-PER

Federal Building, Fort Snelling Twin Cities, Minnesota 55111

AUG 2 1 1975

AIRMAIL

Mr. Ned E. Williams, P.E. Ohio EPA 450 E. Town Street P.O. Box 1049 Columbus, Ohio 43216

Attention: Mr. Bill Rupert

Dear Mr. Williams:

RE: White-Westinghouse Corp. 246 E. Fourth Street Mansfield, Ohio OEPA Permit No. C 203 *AD Public Notice No. 75-07-015

513-385-7396

The U.S. Fish and Wildlife Service has reviewed the referenced public notice and associated material describing the discharge and the conditions under which you propose to issue the applicant a discharge permit. Our comments are submitted under the authority of and in accordance with the provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and are consistent with the intent of the National Environmental Policy Act of 1969.

The applicant is a manufacturer of ranges, clothes washers, and clothes dryers and has 17 existing discharge points into Rocky Fork Creek, a tributary of the Mohican River, at Mansfield, Ohio.

On August 11, 1975, Bruce Crawford of our Ohio Area Office accompanied Mr. Bill Rupert of the Northwest District Office of the Ohio Environmental Protection Agency on an onsite inspection of the White-Westinghouse Corporation grounds and discharge points. Onsite inspection revealed that significant quantities of wastewater containing high chromium concentrations were discharging in violation of the proposed permit in the vicinity of outfall 017. In addition significant amounts of emulsified oil and grease were being discharged from a storm drain not covered by the permit in the vicinity of outfall 017. There were also significant amounts of visible foam being expelled from outfall 001. According to Mr. James Crawford, Powerhouse Supervisor for the White-Westinghouse Corporation, the 614-469-7452 above noted deficiencies would be corrected.

Rocky Fork Creek flows through the city of Mansfield and easterly for 12 miles before entering the Black Fork of the Mohican River at T22N, R17W, S11. Ohio Division of Wildlife records show that

RECEIVED

0FF132 01:13 01:450 A93 01:19

AUG 25 1975 1970 00 01WA 35 3UA 35.

BECEINED | September | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown oin | Brown o



the Rocky Fork Creek fish fauna have been adversely affected by the various polluters in the Mansfield area for over 26 years. No fish were found in Rocky Fork Creek during the 1949 and 1972 field surveys. The Ohio Division of Wildlife has numerous pollution reports for Rocky Fork Creek concerning previous activities of the White-Westinghouse Corporation. The present water quality of the stream is, therefore, unable to support a fish population. The lack of fish is a result of poor water quality, as other necessities for aquatic life are present. Fish samples taken near the mouth of Rocky Fork Creek on the Black Fork of the Mohican River show populations of largemouth bass, white crappie, bluegill, bluntnose minnows, hogsuckers, and grass pickerel. Improvement in water quality would probably result in the movement of these species into Rocky Fork Creek and would improve the fishery and aesthetic value.

The U.S. Fish and Wildlife Service is concerned that the parameters listed in the proposed permit for chromium, copper and zinc are too lenient and will not accomplish the desired improvement in the quality of the Nation's waters as outlined in the 1972 Federal Water Pollution Control Act as amended. According to the Criteria for Water Quality (U.S. EPA 1973), the maximum acceptable total chromium concentration in receiving water is 0.05 mg/l. Maximum acceptable concentration of copper in receiving water is 0.1 of the 96-hour LC₅₀. Safe to lethal levels of copper vary from 0.1 to 0.2 mg/l depending upon water chemistry. The maximum acceptable zinc concentration in water is 0.005 of the 96-hour LC_{50} value. Zinc has been shown to cause an 83 percent reduction in fecundity of fathead minnows at 0.18 mg/l in hard water (Brungs, 1969). All of the above metals will be discharged through outfalls 001 and 002. Chromium, zinc and copper synergize easily to form other more toxic solutions when subjected to the right conditions. little data has been generated concerning low flow conditions in Rocky Fork Creek, we believe that the parameters should ultimately be limited by bioassay.

RECOMMENDATIONS

It is recommended that a permit not be issued for the proposed discharge unless the permit is conditioned as follows:

That the applicant be required to perform bioassays within 2 years after permit issuance, using the receiving water and the most sensitive aquatic fish and/or invertebrate species

BILL

INTEROFFICE COMMUNICATION

TO	Bill Everett, NPDES Permits Section	September 8, 1975
FROM:	Androw Turnon Chief Industrial Wastewater	۸.
SUBJECT:	U.S. Fish and Wildlife Comments on White-Wes	tinghouse Corp.
· · · · · · · · · · · · · · · · · · ·	(C203*AD) Public Notice	

Since the recommendations by U.S. Fish and Wildlife in their letter of 8/21/75 on the subject permit could have significant impact on the industrial NPDES permit program in Ohio, please hold the Agency's response and any changes in the above permit pending my review of the situation and Bill Rupert's proposed response.

AT:rb

cc: Tom Birch
Bob Phelps
Bill Rupert

The term free cyanides refers to both the HCN and CN- forms of cyanide. Total cyanides refers to both dissociable and non-dissociable forms of cyanide. The dissociation constants of the alkali-metal cyanide complexes vary widely. The amount of break-down of these complexes to free cyanides is also influenced by the chemical and physical conditions of the aqueous medium. The simple, inorganic cyanides and the complexes of zinc, cadmium, and lead dissociate readily. Cobalt-cyanide complexes exhibit no dissociation. The ferro and ferricyanide complexes are subject to photodegradation. Without a light source the iron-cyanide complexes will dissociate little. This photodecomposition is dependent on several physical conditions, such as water clarity, mixing, depth, and light availability.

In the aquatic environment, it is hydrocyanic acid and not the cyanide ion, nor the various cyanide complexes, which are toxic. The cyanide anion, because of its electrical charge, cannot permeate the cell membranes as can the more electrically neutral hydrocyanic acid. Cyanide exerts its toxic effects by poisoning the cellular metabolic cycle. It does this by forming a reversible complex with the ferric iron atoms in the iron porphyrin complexes of the cytochrome chain. This results in blocking the pathway for transfer of hydrogen atoms to oxygen, which causes cellular asphyxia 10.

Cyanide, if it does not cause immediate death, can be eliminated from an organism by several metabolic processes. Cyanide does not remain as a residue within an organism and is therefore not a culmulative poison. The primary mechanism of cyanide removal is conversion of free cyanide to thiocyanate (SCN-) in the liver by the enzyme rhodanase. Thiocyanate is then excreted from the body via the urine. Methemoglobin can also assist in cyanide elimination. Hemoglobin, which has a divalent iron atom, normally contains a small fraction of methemoglobin which contains a trivalent iron atom. Cyanide will combine easily with this trivalent iron, but not with the divalent iron of normal hemoglobin. Methemoglobin forms a harmless and irreversible complex with free cyanide. This can help to rid an organism of the highly toxic hydrocyanic acid 11.

Older toxicity studies on aquatic organisms have looked mostly at the acute effects of cyanide. The techniques used have not been consistent between researchers. However, two recent chronic bioassays have been reported, one for the Fathead Minnow (Pimephales promelas), and one for the rainbow trout (Salmo gairdneri).

According to the McKee & Wolf (1963)¹² aquatic invertebrates are more resistent to cyanides than are vertebrates. They cited studies where the midge, <u>Cricoptopus bicinctus</u> survived cyanide concentrations up to 320 ug/1. Daphnia had a 48-hr. toxicity level of 340 ug/1. <u>Thus, the toxicity of cyanides to fish should be the primary consideration in determining a safe level of the substance.</u>

Please Sprint or type in the unshaded areas only.

2C SEPA

U.S. ENVIRONMENTAL PROTECT!
APPLICATION FOR PERMIT TO DISCHAF

WASTEWATER

EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL OPERATIONS

GENCY

Consolidated Permits Program

OUTFALL		LATITUDI			ONGITUE		inds and the name of the receiving water,
(list)	1. 464.	2. MIN.), SEC.	1. 076.	2, MIN.	1, yec.	U. RECEIVING WATER (name)
001	40	45	47	82	30	12	ROCKY FORK CREEK
002	40	45	47	82	30	12	ROCKY FORK CREEK
003	40	45	47	82	30	13	ROCKY FORK CREEK
004	40	45	47	82	30	13	ROCKY FORK CREEK
005	40	45	47	82	30	13	ROCKY FORK CREEK
006	40	45	47	82	30	14	ROCKY FORK CREEK

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

2. OPERATION(S) CONTRIBUTION	NG FLOW	3. TREATMENT		
a. OPERATION (IIst)	b. AVEHAGE FLOW (include units)	a. DESCRIPTION	LIST CO	DES FROI E 2C-1
INDUSTRIAL WASTE TREATMENT	360,000	INDUSTRIAL WASTE	1-0	2-K
PLANT OUTFALL	GD	TREATMENT PLANT	1-G	2-L
First Avenue Outfall from	900 - 000	Non-Contact Cooling Water	Nor	
	·	· · · · · · · · · · · · · · · · · · ·		
			15,	
2, 2, 3, 2,	(Storm Water)		s	
N-Bldg. East Storm Sewer	30,000	Non Contact Cooling Water	Nor	ie
	GD	from Hydraulic Heat Exchange	rs,	
	(37,500 GD Storm water)	& Welders. Roof Drains		
N-Bldg. North	_	Overflow drain for water	Nor	ie
Water Recovery Drain		recovery system. Non-contact		
		cooling water		
N-Bldg. West	24,000	Non-Contact Cooling Water.	X	ζ
Storm Sewer	GD	N-10 Plastic Molding Machine	s	
	(37,500 GD	and Blowdown from Cooling		
	Storm)	Tower. Roof Drains.		
Drain for incinerator	-	The unit is not in use,	No	ne
N-Bldg.		and does not have an EPA		
		Air Permit to operate.		
	INDUSTRIAL WASTE TREATMENT PLANT OUTFALL First Avenue Outfall from Main Plant Bldgs. C,D,E,F,G, H, I, J, K, L N-Bldg. East Storm Sewer N-Bldg. North Water Recovery Drain N-Bldg. West Storm Sewer Drain for incinerator	INDUSTRIAL WASTE TREATMENT 360,000 PLANT OUTFALL GD First Avenue Outfall from 900,000 Main Plant Bldgs. C,D,E,F,G, GD H, I, J, K, L (650,000 GD) (Storm Water) N-Bldg. East Storm Sewer 30,000 GD (37,500 GD Storm water) N-Bldg. North - Water Recovery Drain N-Bldg. West 24,000 Storm Sewer GD (37,500 GD Storm) Drain for incinerator -	INDUSTRIAL WASTE TREATMENT 360,000 INDUSTRIAL WASTE PLANT OUTFALL GD TREATMENT PLANT First Avenue Outfall from 900,000 Non-Contact Cooling Water Main Plant Bldgs. C,D,E,F,G, GD from Hydraulic Heat Exchange (650,000 GD) Air Compressors, Welders & (Storm Water) N-Bldg. East Storm Sewer 30,000 Non-Contact Cooling Water GD from Hydraulic Heat Exchange (37,500 GD) & Welders. Roof Drains N-Bldg. North - Gwerflow drain for water Water Recovery Drain recovery system. Non-contact Cooling water N-Bldg. West 24,000 Non-Contact Cooling Water. Storm Sewer GD N-10 Plastic Molding Machine (37,500 GD and Blowdown from Cooling Storm) Tower. Roof Drains. Drain for incinerator - The unit is not in use, N-Bldg. Wase and does not have an EPA	INDUSTRIAL WASTE TREATMENT 360,000 INDUSTRIAL WASTE 1-0 PLANT OUTFALL GD TREATMENT 1-G First Avenue Outfall from 900,000 Non-Contact Cooling Water Nor from Hydraulic Heat Exchangers H, I, J, K, L (650,000 GD) Air Compressors, Welders & (Storm Water) Air Conditioners. Roof Drains N-Bldg. East Storm Sewer 30,000 Non-Contact Cooling Water Nor GD from Hydraulic Heat Exchangers, & Welders. Roof Drains N-Bldg. North GD Storm water) N-Bldg. North - Gverflow drain for water Nor recovery system. Non-contact cooling water N-Bldg. West 24,000 Non-Contact Cooling Water. XD Storm Sewer GD N-10 Plastic Molding Machines (37,500 GD N-10 Plastic Molding Machines and Blowdown from Cooling Storm) Tower. Roof Drains. Drain for incinerator - The unit is not in use, Non-Bldg. And does not have an EPA

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item 3. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined fe.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

2C SEPA

U.S. ENVIRONMENTAL PROTECTION AGENCY APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER

EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL OPERATIONS

Consolidated Permits Program

A. OUTFALL NUMBER	В.	LATITUDE		C. L	ONGITUE	Œ]		D. RECEIVING WATER (name)		
(list)	1, DE6.	2. MIM.	3. SEC.	1. DEG. 2. MIN.), SEC.			D. RECEIVING WATER (name)		
007	40	45	47	82	30	14	ROCKY	FORK	CREEK		
008	40	45	47	82	30	14	ROCKY	FORK	CREEK		
009	40	45	47	82	30	14	ROCKY	FORK	CREEK		
010	40	45	47	82	30	14	ROCKY	FORK	CREEK		
011	40	45	47	82	30	13	ROCKY	FORK	CREEK		
012	40	45	47	82	30	13					

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

- A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.
- B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUT-	2. OPERATION(S) CONTRIBUT		3. TREATMENT b. LIST CODES FRO				
(list)	a. OPERATION (list)	b. AVERAGE FLOW (include units)	a, DESCRIPTION	b. LIST COL	DES FRO		
<u>0</u> 07	OUTFALL X-BLDG. #3		ROOF DRAINS (NO FLOOR	ИОЙ	Œ		
		(52,000 GD	DRAINS)				
		STORM WATER)					
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			ROUTED TO INDUSTRIAL WASTE				
			SEWER. THIS SEWER NOT USED.				
009 OU	OUTFALL X-BLDG. #1	-	ROOF DRAINS	NON	Œ		
		(30,000 GD					
		STORM WATER)					
		<u> </u>					
010	OUTFALL Y-BLDG.		OVERFLOW DRAIN FOR WATER	NON	IE		
	SOUTH WATER RECOVERY DRAIN		RECOVERY SYSTEM. NON-CONTACT	ŗ .			
			COOLING WATER.				
011	OUTFALL Y-BLDG. #1	40,000	NON-CONTACT COOLING WATER	ИОХ	IE.		
		GD	FROM WELDERS.				
012	OUTFALL Y-BLDG. #2	-	OVERFLOW DRAIN-CONDENSATE	NON	NE		
		(22,500 GD	RETURN PUMPS TO POWER HOUSE.				
		STORM WATER)	ROOF DRAINS.				

OFFICIAL USE ONLY (effluent guidelines sub-categories)

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8. Osts for "as burned" coal: (TO BE INCLUDED IN NEXT PERMIT)

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II. Test Wethods

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REQUEST FOR THIS	ВОПАТОЯЧ	BORATORY	**************************************	*** TORY	ANIC	FOS-9001-
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CHEMED CORPORATION

eastern regional office: 6922 HAMILTON AVENUE • CINCINNATI, OHIO 45231 • TELEPHONE 513/521-7212

October 24, 1977

Mr. Jerry Rich Ohio Environmental Protection Agency Northwest Section 1035 Devlak Grove Bowling Green, Ohio 43402

> Re: Product Toxicity Information - White-Westinghouse, Mansfield, Ohio

Dear Mr. Rich:

As per our telephone conversation of 10-20-77, please be advised that Dearborn Chemical Division of Chemed Corporation is proposing the use of Dearborn 874 to treat 40,000 GPD of once-through cooling water at White Westinghouse in Mansfield, Ohio. The recommended dosage of Dearborn 874 is 10 ppm fed 3 ppm continuously to accomplish scale and fouling inhibition.

It is our understanding that prior to such use of Dearborn 874, notification of the toxicity of this product must be made to your office. Therefore, please accept the following data on Dearborn 874.

LC₅₀ - 96 hour

Bluegill not less than mqq 000

Trout not less than 700 ppm

11-4

I trust that the above information will prove suitable for your purposes. In order to facilitate a prompt initiation of this treatment program, an immediate reply from your office would be appreciated.

Thank you in advance for your assistance in this matter.

Sincerely,

DEARBORN CHEMICAL DIVISION CHEMED CORPORATION

William J. Harfst

William F. Harfst

Eastern Region Technical Director

WFH: cmb

ChicE+∆ Inter-Office Communication

TO:	Dave Northrop, Environmental Law	DATE: <u>1/9/78</u>	
FROM:	Mike Zwayer, District Engineer	·	
SUBJECT:	Westinghouse Effluent Calculations for Nickel		

The average flow from Westinghouse is 0.311 mgd.

Rocky Fork

Drainage area: 30 sq. mi.
7 day annual low flow: 1.68 cfs

1. low flow in gpd= 1.68 cfs x 3600 sec x 24 hrs x 7.48 gal

- = 1085736.9 gpd (gallons/day)
 - = 1.086 mgd (million gallons/day)
- 2. Total flow in stream = average flow from Westinghouse + low flow

Total Flow = 0.311 + 1.086 = 1.397 mgd

3. Westinghouse loading = Westinghouse concentration x = 8.34 lbs/gal x Westinghouse average flow

day

cu.ft.

- use a proposed concentration of 1.5 mg/1

loading = (1.5) (8.34) (0.311) = 3.89 lbs/day

4. Assuming there are no nickel concentrations present upstream from Westinghouse, then:

stream loading = Westinghouse loading

Stream loading = stream concentration x 8.34 lbs/gal x total flow in stream

3.89 lbs/day = (stream concentration) (8.34) (1.397)

stream concentration = $3.89/(8.34 \times 1.397) = 0.33 \text{ mg/}1$

Water Quality Standard for Nickel is 0.4mg/1.

The average flow from Westinghouse was determined by averaging a year's worth of flow data taken from Westinghouse monthly operating reports.

The low flow value was taken from this office's files.

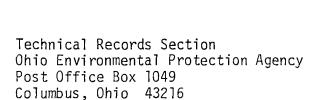
We therefore would recommend changing the final nickel limits to .75 mg/l - avg. and 1.5 mg/l - max.. Water quality standards will be complied with and the limitations will be more in line with BPT. These numbers also are fairly representative of the companys existing effluent quality as noted on the attached graphs, if the abnormally high numbers are not included.

MLZ/kar

MANSFIELD PRODUCTS COMPANY

A DIVISION OF WHITE-WESTINGHOUSE CORPORATION 246 East Fourth Street, Mansfield, Ohio 44902 (419) 755-6011

January 13, 1978



Dear Sir:

Attached is the December 1977 Analysis of our Effluents. The exceptions to the Permit are:

OUTFALL	DATE	<u>PARAMETER</u>	REPORTED	LIMITS
001	12-13	FREE CYANIDE MAX	.15	.10 MG/L
001	12	FREE CYANIDE AVG	.09	.05 MG/L
001	12- 6	HEX-VAL CHROME MAX	.319	.10 MG/L
001	12	HEX-VAL CHROME AVG	.11	.05 MG/L

FREE CYANIDE

The cyanide plan is scheduled to be discussed at the Pre-hearing Conference with Ohio $\ensuremath{\mathsf{EPA}}$.

HEX-VAL CHROME

The max. limit was exceeded one time, which also caused the average to be high. It is noted that the following two test samples (Dec. 13 and Dec. 20) tested AA. Therefore, the Chrome Teaks have been corrected and the treatment is in control.

Very truly yours,

FACILITIES MANAGER

Tidmore

at Attachments

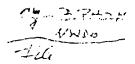
PERMITS AND COMPLIANCE

*0 BM BE T *

One of the White Consolidated Industries.

MANSHELD PRODUCTS COMPAN

A DIVISION OF WHITE-WESTINGHOUSE CORPORATION 246 East Fourth Street, Mansfield, Onio 44902 (419) 755-6011



April 10, 1978

Mr. Stanford Stein
Enforcement Division
United States Environmental
Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

Ref: Permit No. OH-0004600, Mansfield Products Company, Mansfield, Ohio

Re: Squire, Sanders & Dempsey's Letter - March 4, 1978

Dear Mr. Stein:

This letter is intended to provide additional support information and sequence of operational events--Outfalls 002, 003, 004, 005, 011 and 012.

Prior to July 1975, a portion of the effluent from the Waste Treatment facility was pumped into the shop water piping system via a water recovery pump at a rate of approximately 160,000 gallons per day. Since the effluent 001 from the Waste Treatment facility contained nickel, suspended solids, etc., these contaminants were pumped into the shop water piping system, and were eventually discharged to Rocky Fork Creek through the storm sewers 002, 003, 004, 005, 011 and 012. Testing of these outfalls indicated that these contaminants were in the storm sewer effluents. Reference "Schematic Water Flow" attached.

During July 1975, the Waste Treatment Water Recovery System was removed from operation and the Waste Treatment effluent was discharged into Rocky Fork Creek. As a result of no longer operating the recovery system, outfalls 002, 003, 004, 005, 011 and 012 discharged only non-contact cooling water from welders, air conditioning units, hear exchangers, roof drains, and floor drains. This is shown schematically in the flow diagrams of outfalls 003, 004, 005, 010, 011 and 012, dated 4/4/77 (Attachments). This water was and is uncontaminated city and well water. Additionally, the data recorded on the flow diagrams shows that the effluents were within the limits of the parameters, and the monitoring reports demonstrate the success of the removal of the recirculated Waste Treatment water from the shop water system that discharges into the storm sewer outfalls 002, 003, 004, 005, 011 and 012.

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Ohio Environmental Protection Agency
NORTHWEST DISTRICT

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Mr. Stanford Stein U.S. E.P.A. Region V Chicago, Illinois

The above information is valid for the four requests for additional information—November 18, 1977 (Attachment).

ITEM	OUTFALL	PARAMETER
# 1	002 and 005	NICKEL, OIL & GREASE
# 2	· 003 and 004	OIL & GREASE
# 3	011 (NOT 001)	COPPER, NICKEL, SUSPENDED SOLIDS, OIL & GREASE
# 4	003, 004, 005, 011 and 012	Ph

We are assuming Item #3 is referring to outfall 011, not 001. Outfall 001 was not a part of this request.

We would appreciate your evaluation of this additional support data, and your response thereto. We shall, to the extent available, furnish additional data that you may require.

Very truly yours,

M. Tidmore

FACILITIES MANAGER

at Attool

÷.)

Attachments

Vcc: Mr. Ralph Everett, Ohio E.P.A. Post Office Box 1049
Columbus, Ohio 43216

cc: Mr. Thomas Hanson
Squire, Sanders & Dempsey
1800 Union Commerce Building
Cleveland, Ohio 44115

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

OHIO EPA

NOTIFICATION OF CASE REFERRAL TO THE ATTORNEY GENERAL'S OFFICE

Robert J. Mans	son, Chief, Northwest District Office
Mark V. Sta	inga, Legal Consultant, thru Stephen T. Yost, Asst. Lega
April 9,	, 1979
W	White-Westinghouse Corp., Mansfield Products Div.
	Case Name
Ε	EBR
	Type of Case
E	EBR 79-28
	Case Number
	Permit/Application/Source Number
	remiter Apprication, source number
	Location of Facility
	Location of facility
e Prepared By	*
•	
ferenced case	s Office was requested to represent the Agency in the e on this date. Your office may be requested to provide paration of this case.
Examiner:	N/A
ng Date:	N/A .
Date:	Not yet set by EBR
	Mark V. Ste April 9. Prepared By rney General' ferenced case ce in the pre Examiner: ng Date:

If you have any questions, please contact me at 614-466-3491.

RECEIVED

APR 1 1 1979

Ohio Environmental Protection Agency NORTHWEST DISTRICT

cc: Dave Northrop

Ernie Rotering Ernie Neal

	NPDES CO	MPLIA ISI	PECTION R	REPOR	RT (Coding Instru		of last					
TRANSACTION CODE	· · · · · · · · · · · · · · · · · · ·	NPDES		YR	MO DA T	YPE TOR	- FAC					
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65	70											
SECTION A - Pe												
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l	d Produces C					7-26-37						
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RESPONSIBLE		retis: 18147	<u> </u>	TITL				PHONE				
1. 1. 1.	rimaten			57.45	oflittigs "ar	GC98		279-757-3073				
FACILITY REP				TITL		***		PHONE				
3171 Woo	ds			Sug	pervisor, 21	ant Engine	eartno	119-755-6017				
SECTION B - Effluent Characteristics (Additional sheets attached)												
PARAMETER/ OUTFALL		MINIMUM	AVERAC	GE	MAXIMUM		ADDI1	FIONAL				
Total Or	SAMPLE MEASUREMENT				0.05 mg/1	Water Ma:	nadema	ent040 un/1				
7 001	PERMIT REQUIREMENT		0.5 ma/	7.0 00/7								
Total Qu	SAMPLE MEASUREMENT				0.05 mg/l	Water Mas	nageme	entbelow datectal				
7 331	PERMIT REQUIREMENT		0_5 mg/	′]	1.0 mg/3			I 5.				
Total	SAMPLE MEASUREMENT				0.3 %0/1	Water Management125 ug/1						
7.59%	PERMIT REQUIREMENT		0.5 mg/	"	1.0 mg/1							
Total Cr	SAMPLE MEASUREMENT				0.03 mg/1	Water Mar	<u>iacem</u>	ant-chalou datantal				
Filtrate	PERMIT REQUIREMENT		0.5 mg/	<u>′1</u>	1.0 mg/1			}†r				
Total Cu	SAMPLE MEASUREMENT				0.03 mg/1	liater Mar	า <u>ลศอก</u> ร	ent120 69/1				
L	PERMIT REQUIREMENT	= Satisfactory II -	0.5 mg/		7.0 mg/1	•		·				
 	WITHIN PERMIT REQU				A = NOT applicable) MAINTENANCE	33 SAMI	PLINGP	ROCEDURES				
RECORDS	AND REPORTS		OMPLIANCE					RY PRACTICES				
PERMIT VE	RIFICATION		LOW MEASU			отні	ER:					
SECTION D - Co	omments			-								
SECTION E - In	 -			г	-	1		ENFORCEMENT DIVISION				
INSPECTED BY	SIGNATU	RES			AGENCY	DATE		USE ONLY COMPLIANCE STATUS				
	INSPECTED BY							□ COMPLIANCE				
REVIEWED BY							NONCOMPLIANCE					

Form Approved OMB No. 158 - R0073

F	NPDES CO	MPLIA	NSP E	CTION	REPO	RT (Coding	Instru	ctions		of las	t page)	
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21							 	1				_64
	ADDITIONAL											
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SECTION A - Pe		TV (Include)	County	State and	71P.co/	101					EXPIRATION DATE	
	Products Co		country,	Diale and	211 101	10)						·
White-Wes	tinghouse Co	rp.									7-26-87 ISSUANCE DATE	
246 E. For	urth St.										7-27-76	
RESPONSIBLE	OFFICIAL 44902		•		TITL	E			_		PHONE	
M. W. Tidmore Facilities Manager											419-755-6017	
FACILITY REPR					TITLI						PHONE	
	Bill Woods Supervisor, Plant Engineering 419-755-6011											
SECTION B - Effluent Characteristics (Additional sheets attached)												
PARAMETER/ OUTFALL		MINİMU	м	AVERA	AGE	MAXIMU	М			ADDI	TIONAL	
Total	SAMPLE MEASUREMENT					0.3 mg	/1	Wat	er Ma	กลตะเ	ment 0.1 mg	:/1
/Filtrate	PERMIT REQUIREMENT			0.5 m	g/1	1.0 mg	/1					
	SAMPLE MEASUREMENT				-							
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REVIEWED BY												

CODING INSTRUCTIONS

Sulvis roof for Albert

Column 1 ... Transaction Code - Use N, C, or D for New, Change or Delete. All inspections will be new unless there is an error in the data keypunched into WENDB. Column 2 Card Code - Always 5 for this card. Columns 3-11 NPDES - The NPDES permit number. (The State permit number may be accommodated in the remarks or additional 3 °4 (1 × 3) ° (1 × 4) 14 (1 spaces). Column 12-17 Inspection Date - Entered in the year/month/day format (e.g. 77/06/30 = June 30, 1977). Column 18 Inspection Type - An inspection will fall into one of two possible categories: 'C' for Compliance Evaluation or 'S' for Compliance Sampling. Column 19 Inspector Code - An inspection may be performed by the Region, State or NEIC (U.S. EPA National Enforcement Investigations Center). It may also be the result of a joint effort. (Credit in FPRS for a joint inspection is given to the lead agency.) Acceptable codes for WENDB are: ---.... R - EPA Regional inspections S - State inspections J - Joint EPA and State inspections - EPA lead T - Joint EPA and State inspections - State lead N - NEIC inspections Column 20 Facility Type - This code describes the type of facility that was inspected. Acceptable codes are: Municipal - Publicly-Owned Treatment Works (POTWs) with 1972 Standard Industrial Classification (SIC) 4952. Industrial - Other than Municipal, Agricultural, and Federal facilities. Agricultural - Those facilities classified with 1972 SIC 0111-0971. Federal - Those facilities identified as Federal by EPA Regional office. ---Columns 21-70 Remarks - This remarks field provides the inspector with a vehicle to store descriptive information about the inspection. There is no set format within this 50position field. Individual Regions or States may choose to set aside portions of this field for their own specific needs.

Sections F thru L: Complete on all insp, as appropriate. N/A	A = Not Applicable	PERMI Untu	סטפ+טע. 1 אס. 1 אס.	
SECTION F - Facility and Permit Background				
ADDRESS OF PERMITTEE IF DIFFERENT FROM FACILITY (Including City, County and ZIP code)	7-12-73 FINDINGS	VESTIGATION	N BY EPA/ST	ATE
	The entity was for with its NPDES Po		e in com	plianco
SECTION G - Records and Reports				
RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT.	☐YES ☐NO ☐N/A (F	urther explana	tion attached	
DETAILS:				
(a) ADEQUATE RECORDS MAINTAINED OF:		☐ YES	NO	□ N/A
(i) SAMPLING DATE; TIME, EXACT LOCATION (ii) ANALYSES DATES, TIMES		☐ YES	□ NO	□ N/A
(iii) INDIVIDUAL PERFORMING ANALYSIS	· · · · · · · · · · · · · · · · · · ·	☐ YES	□ NO	□ N/A
(iv) ANALYTICAL METHODS/TECHNIQUES USED		☐ YES	□ №	□ N/A
(v) ANALYTICAL RESULTS (e.g., consistent with self-monitoring re	port data)	☐ YES	□ №	□ N/A
(b) MONITORING RECORDS (e.g., flow, pH, D.O., etc.) MAINTAINED FO INCLUDING ALL ORIGINAL STRIP CHART RECORDINGS (e.g. cont.		ı, _	_	
calibration and maintenance records).		YES	□ NO	□ N/A
(c) LAB EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS K		YES	□ NO	□ N/A
(d) FACILITY OPERATING RECORDS KEPT INCLUDING OPERATING	LOGS FOR EACH TREATMENT UN		□ NO	□ N/A
(e) QUALITY ASSURANCE RECORDS KEPT.		☐ YES	□ №	□ N/A
(f) RECORDS MAINTAINED OF MAJOR CONTRIBUTING INDUSTRIES PUBLICLY OWNED TREATMENT WORKS.	(and their compliance status) USIN	G YES	□ №	□ n/a
SECTION H - Permit Verification				
INSPECTION OBSERVATIONS VERIFY THE PERMIT. YES DETAILS:	NO □N/A (Further explanation	on attached	/ 	
(a) CORRECT NAME AND MAILING ADDRESS OF PERMITTEE.		☐ YES	□ NO	□N/A
(b) FACILITY IS AS DESCRIBED IN PERMIT.		☐ YES	□ №	□ N/A
(c) PRINCIPAL PRODUCT(S) AND PRODUCTION RATES CONFORM WI APPLICATION.	TH THOSE SET FORTH IN PERM	☐ YES	□ NO	□ N/A
(d) TREATMENT PROCESSES ARE AS DESCRIBED IN PERMIT APPLIC		YES	NO	□ N/A
(e) NOTIFICATION GIVEN TO EPA/STATE OF NEW, DIFFERENT OR IN	NCREASED DISCHARGES.	☐ YES	NO	
(f) ACCURATE RECORDS OF RAW WATER VOLUME MAINTAINED.		☐ YES	□ NO	□ N/A
(g) NUMBER AND LOCATION OF DISCHARGE POINTS ARE AS DESCR	IBED IN PERMIT.	YES	No	□ N/A
(h) CORRECT NAME AND LOCATION QF RECEIVING WATERS. (i) ALL DISCHARGES ARE PERMITTED.		YES YES	No □ No	N/A □ N/A
SECTION I - Operation and Maintenance	· · · · · · · · · · · · · · · · · · ·	L 123		LIN/A
TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED. DETAILS: Batch Chrome Reduction process not		further explana	ation attached	!
(a) STANDBY POWER OR OTHER EQUIVALENT PROVISIONS PROVID		☐ YES		□ N/A
(b) ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILU		YES	□ NO	□ N/A
(c) REPORTS ON ALTERNATE SOURCE OF POWER SENT TO EPA/STA		☐ YES	□ NO	□ N/A
(d) SLUDGES AND SOLIDS ADEQUATELY DISPOSED.		YES	□ NO	□ N/A
(e) ALL TREATMENT UNITS IN SERVICE.		YES	NO	□ N/A
(f) CONSULTING ENGINEER RETAINED OR AVAILABLE FOR CONSU	LTATION ON OPERATION AND	☐ YES	□ NO _	□ N/A
(g) QUALIFIED OPERATING STAFF PROVIDED.		☐ YES	□ №	□ N/A
(h) ESTABLISHED PROCEDURES AVAILABLE FOR TRAINING NEW O	PERATORS.	YES	□ ио	□ N/A
(i) FILES MAINTAINED ON SPARE PARTS INVENTORY, MAJOR EQUIPARTS AND EQUIPMENT SUPPLIERS.	·	YES	□ №	□n/a
(j) INSTRUCTIONS FILES KEPT FOR OPERATION AND MAINTENANC EQUIPMENT.	E OF EACH ITEM OF MAJOR	☑ YES	□ NO	□n/a
(k) OPERATION AND MAINTENANCE MANUAL MAINTAINED.		☐ YES	□ №	□ N/A
(I) SPCC PLAN AVAILABLE.		☐ YES	□ NO	□ N/A
(m) REGULATORY AGENCY NOTIFIED OF BY PASSING. (Dates		☐ YES	NO	□ N/A
(n) ANY BY-PASSING SINCE LAST INSPECTION.		C YES	□ NO	□N/A
(o) ANY HYDRAULIC AND/OR ORGANIC OVERLOADS EXPERIENCED)	☐ YES	□ NO	□ N/A

	PERMIT	NO.	
	<u> </u>	<u> </u>	
SECTION J - Compliance Schedules			
PERMITTEE IS MEETING COMPLIANCE SCHEDULE.	planation att	ached	/
CHECK APPROPRIATE PHASE(S):			į
(a) THE PERMITTEE HAS OBTAINED THE NECESSARY APPROVALS FROM THE APPROPRIATE AUTHORITIES TO BEGIN CONSTRUCTION.			
(b) PROPER ARRANGEMENT HAS BEEN MADE FOR FINANCING (mortgage commitments, grants, etc	. <i>)</i> .		,
(c) CONTRACTS FOR ENGINEERING SERVICES HAVE BEEN EXECUTED.			
(d) DESIGN PLANS AND SPECIFICATIONS HAVE BEEN COMPLETED.			
(e) CONSTRUCTION HAS COMMENCED.			
(f) CONSTRUCTION AND/OR EQUIPMENT ACQUISITION IS ON SCHEDULE.			
(g) CONSTRUCTION HAS BEEN COMPLETED.			ļ
(h) START-UP HAS COMMENCED.			
(i) THE PERMITTEE HAS REQUESTED AN EXTENSION OF TIME.			
SECTION K - Self-Monitoring Program			
Part 1 — Flow measurement (Further explanation attached)			\
PERMITTEE FLOW MEASUREMENT MEETS THE REQUIREMENTS AND INTENT OF THE PERMIT. DETAILS:	☐ YES	□ №	□ N/A
(a) PRIMARY MEASURING DEVICE PROPERLY INSTALLED.	☐ YES	. 🗆 NO	□ N/A
TYPE OF DEVICE: DWEIR DPARSHALL FLUME MAGMETER DVENTURI METER	OTHER (St	ecify	
(b) CALIBRATION FREQUENCY ADEQUATE. (Date of last calibration)	YES YES	□ мо	□N/A
(c) PRIMARY FLOW MEASURING DEVICE PROPERLY OPERATED AND MAINTAINED.	☐ YES	□ №	□ N/A
(d)SECONDARY INSTRUMENTS (totalizers, recorders, etc.) PROPERLY OPERATED AND MAINTAINED.	U, YES	NO	□ N/A
(e) FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGES OF FLOW RATES.	☐ YES	□ NO	□ N/A
Part 2 — Sampling (Further explanation attached)			1
PERMITTEE SAMPLING MEETS THE REQUIREMENTS AND INTENT OF THE PERMIT.	☐ YES	□′, NO	□ N/A
DETAILS:		•	
(a) LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES.	· YES	□ NO	□ N/A
(b) PARAMETERS AND SAMPLING FREQUENCY AGREE WITH PERMIT.	Ų YES	Пио	□ N/A
(c) PERMITTEE IS USING METHOD OF SAMPLE COLLECTION REQUIRED BY PERMIT. IF NO,	YES	□ NO	□ N/A
(d) SAMPLE COLLECTION PROCEDURES ARE ADEQUATE.	☐ YES	□ NO	□ N/A
(i) SAMPLES REFRIGERATED DURING COMPOSITING	YES	□ NO	_ □N/A
(ii) PROPER PRESERVATION TECHNIQUES USED	_ YES_	. №	□N/A
(iii) FLOW PROPORTIONED SAMPLES OBTAINED WHERE REQUIRED BY PERMIT	YES	по	□·N/A
(iv) SAMPLE HOLDING TIMES PRIOR TO ANALYSES IN CONFORMANCE WITH 40 CFR 136.3	YES	□ NO	□ N/A
(e) MONITORING AND ANALYSES BEING PERFORMED MORE FREQUENTLY THAN REQUIRED BY		.e	
PERMIT.	YES	_ ₽ NO	□ N/A
(f) IF (e) IS YES, RESULTS ARE REPORTED IN PERMITTEE'S SELF-MONITORING REPORT.	☐ YES	□ NO	□.N/A
Part 3 — Laboratory (Further explanation attached)			
PERMITTEE LABORATORY PROCEDURES MEET THE REQUIREMENTS AND INTENT OF THE PERMIT. DETAILS:	YES	□ ио	□N/A
(a) EPA APPROVED ANALYTICAL TESTING PROCEDURES USED. (40 CFR 136.3)	YES	Ои	□ N/A
(b) IF ALTERNATE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED	. D YES	□ №	□ N/A
(c) PARAMETERS OTHER THAN THOSE REQUIRED BY THE PERMIT ARE ANALYZED.	☐ YES	.□ NO	□ N/A
(d) SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT.	YES	□ NO	□ N/A
(e) QUALITY CONTROL PROCEDURES USED.	√ YES	□ №	□N/A
(f) DUPLICATE SAMPLES ARE ANALYZED % OF TIME. (See Section !)	YES	□ №	□ N/A
(g) SPIKED SAMPLES ARE USED% OF TIME.	YES	,□. ио	□ N/A
(h) COMMERCIAL LABORATORY USED.	☐ YES	□ NO	□ N/A
(i) COMMERCIAL LABORATORY STATE CERTIFIED.	YES	по	□N/A
LAB NAME Water Management, Inc.			
LABADDRESS 2480 Groadway Avenue, Cleveland, OH 44115 216-566-	309C		

Form Approved OMB No. 158-R0073

PAGE 4 OF 4

						PERMIT NO 0H00046	
ECTION L - Effi	uent/Receiving Wat	ter Observations	(Further explanation	attached)		⊍πσυυ+σ	GU
OUTFALL NO.	OILSHEEN	GREASE	TURBIDITY	VISIBLE FOAM	VISIBLE FLOAT SOL	COLOR	OTHER
001	None	None	Slightly	Moderate	Hono	Slight grean/brow	1
002	None	None	Clear	!lone	Hone	None	
010	-	, 40	-	-	-	40	No Flow
		_					-
ECTION M - Sam	pling Inspection P		nd N: Complete as a servations (Further				
AMPLE REFRIG	llytical Results (At)	G COMPOSITING OLUME, AND NA tach report if nec	G: DYES				
		e.					
•							

EPA Form 3560-3 (9-77)

MANSFIELD PRODUCTS COMPANY

A DIVISION OF WHITE-WESTINGHOUSE CORPORATION 246 East Fourth Street Mansfield, Ohio 44902 (419) 755-6011

June 14, 1979

Technical Records OHIO ENVIRONMENTAL PROTECTION AGENCY P.O. Box 1049 Columbus, Ohio 43216

15

Dear Sir:

Attached is the May, 1979 Analysis of our Effluents.

The exception to the Permit:

Date	Outfall_	Parameter	Limit	Reported
5	001	Nickel - Total Daily Average	500 UG/L	790 UG/L
5–29	001	Nickel - Total Daily Maximum	1000 UG/L	3400 UG/L

The reported daily average value exceeded the Permit parameter, because of the one high reported daily maximum value - May 29, 1979. The other four daily maximum values are as follows, and are well within the Permit parameters for Nickel:

June	1,	1979	100	UG/	L	,	
June	8,	1979	200	UG/	L		
June	15,	1979	250	UG/	L		
June	21,	1979	AA		Below	detectable	limits.

A Nickel Sulfate tank in the X-Pickle process was found to be faulty and leaking through the Waste Treatment Plant over the Memorial Holiday weekend. There was control for Saturday with the Waste Treatment operator on the job. There was no operator assigned to work Memorial Day - Monday, May 28, 1979.

Corrective action (repaired leak) has been taken and the process is under control.

Yours truly,

M. Tidmore

Attachments

Facilities Manager

One of the White Consolidated Industries

cc: Mr. Van Carson, Squire, Sander Dempsey, Cleveland, Ohio

Mr. J. L. Calhoun, White Consolidated Industries, Inc., Cleveland, Ohio

MAINSFIELD PRODUCTS COMPANY

A DIVISION OF WHITE-WESTINGHOUSE CORPORATION 246 East Fourth Street, Mansheld, Ohio 44902 (419) 755-6011

file NPDES
RICHLAND CO.

July 13, 1979

Technical Records
OHIO ENVIRONMENTAL PROTECTION AGENCY
P. O. Box 1049
Columbus, Ohio 43216

RECEIVED

JUL 2 3 1979

Dear Sir:

Ohio Environmental Protection Agency NORTHWEST DISTRICT

Attached is the June 1979 Analysis of our Effluents.

The exception to the Permit:

Date	<u>Outfall</u>	Parameter	_Limit_	Reported
6	001	Chrome Hex-Val Daily Average	50 UG/L	102.1 UG/L
6-4	001	Chrome Hex-Val Daily Maximum	100 UG/L	148.6 UG/L
6-19	001	Chrome Hex-Val Daily Maximum	100 UG/L	259.8 UG/L

Chrome Hex-Val

Chrome Hex-Val has been in control with no reported excursions for over one year (last excursion, March 1978). During that period the level of production was stable; therefore, the process was in control with experienced hourly personnel running the operation.

A schedule increase over the last two months has required an addition of in excess of 100 hourly employees to be hired. Union contract prescribed bumping procedures must be followed. Consequently, inexperienced help was assigned to the bonderizers (which contain the chromic rinse), and the process went out of control, resulting in the two reported excursions. Additional training will be given to the new employees involved in the bonderizer areas so as to insure the prescribed procedures are followed and the process will be in control.

Yours truly,

M. Tidmore

Facilities Manager

Attachments

cc: Mr. Van Carson, Squire, Sanders & Dempsey, Cleveland, Ohio

cc: Mr. J. L. Calhoun, White Consolidated Industries, Inc., Cleveland, Ohio

MANSFIELD PRODUCTS COMPANY

A DIVISION OF WHITE-WESTINGHOUSE CORPORATION 246 East Fourth Street, Mansfield, Ohio 44902 (419) 755-6011

September 5, 1979

Mr. J. Brian Gasiorowski
District Engineer
State of Ohio
Environmental Protection Agency
Northwest District Office
1035 Devlac Grove Drive
Bowling Green, Ohio 43402

Reference: Hexavalent Chromium Violations Your Letter Dated August 6, 1979

Dear Mr. Gasiorowski:

As requested in your letter, the following report is submitted concerning the hexchrome violations, and steps that have been taken to eliminate possible future problems.

There are four chromic rinse tanks within the facility that contain a total of 3800 gallons of hex-chrome solution. The four tanks are dumped once per week to the chrome storage tank (7300 gallon capacity) via a chromic rinse sewer for treatment.

The hex-chrome is reduced by the pickle acid waste and tests indicate that less than 1000 gallons of acid is required to complete the treatment. Except for the third floor bonderizer chromic rinse system, the systems are self-contained with no carry over or over flow. Therefore, hex-chrome cannot flow into the waste treatment system by any other route than the chromic rinse sewer. There is a spray rinse following the third floor system which is a requirement. A fog-type spray of deionized water is utilized at a rate somewhat less than the evaporation rate from the system. Thus, normally there is little or no carry over or chromic rinse water from the third floor system.

Sequence of events:

- 1. No excursions for hex-chrome for fifteen (15) months.
- 2. Was not aware of June excursions until first week in July when the monthly report from the Lab was received.
- 3. Immediately reviewed facilities and treatment method to determine cause.

RECEIVED

SEP 1 0 1979

Ohio Environmental Protection Agency
NORTHWEST DISTRICT

One of the White Consolidated Industries



Re: Solid Waste RCRA Inventory

Mr. Witt Eutzy, President White Westinghouse Corporation 246 E. 4th Street

July 23, 1981

M- TID HURE

Mansfield, OH <u>449</u>02

Dear Mr. Eutzy:

The Office of Land Pollution Control, Northwest District Office of the Ohio Environmental Protection Agency, is presently conducting a survey of industrial waste disposal practices in those counties within our jurisdiction. The results of this survey will be used for the purpose of implementing an inventory of industrial waste disposal sites, as mandated by the Resource Conservation and Recovery Act (RCRA). On site and off site facilities will later be evaluated in accordance with criteria published in Volume 44, No. 179, of the Federal Register.

For our information, please briefly answer the questions on the enclosed form, and return to the address given below as soon as possible. Use additional paper if necessary. Thank you for your cooperation. If you have any questions or comments, please call me at 419-352-8461.

Sincerely,

David L. Ferguson

Environmental Scientist

Office of Land Pollution Control

aviel Gerguson

Northwest District Office

DLF:sd

Callyonia insortantiton Conjunction Number .

MANSFIELD PRODUCTS COMPANY

ودنائلللا الالمادينات

246 E. FOURTH ST. MANSFIELD, OH 44902

County in which company focuted:

Richland

Name of person responding to survey: M. Tidmore Facilities Mgr.

Telephone: (419) 755-656

with of warren currently areduced:

possistion of w	dentally honorared	noted, pludgo Liquid, hazardous	on-or off-site disposal	mothed (pit, incinerator, londfill
1. F006 2. D005 3. F006 4. D001 (Paint Wastes)	150/Ton/Month 5 Ton/Month 2000 Gallons/Month 8 Barrels/Month	Hazardous Sludge Hazardous Sludge Hazardous Liquid Hazardous Liquid	Off-Site Off-Site Off-Site Off-Site	Landfill Landfill Incinerator

Off-sage: Cave hunters name and address, and sage of ultimate disposal, for each of the above Listed wastes.

1. Browning-Ferris Industries Mansfield, OH

2. Mansfield Products Co.

3. Ny-Trex, Richfield, OH

4. Mansfield Products Co.

Richland County Landfill

Mansfield, OH

Richland County Landfill, Mansfield, OH

Chem-Clear, Cleveland, OH

Robert Ross & Sons, Grafton, OH

Closed sires: Cive waste descriptions and approximate quantities for any wastes proviously disposed in a new closed or inactive on-time facility. Give dates same wood and closed.

None

if you were unable to answer any above questions because the information is considered confidential by your company, indicate this here and we will contact ソンは、ひじょうしいこれより。

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OHIO EPA N. W. D. 0.

constituent concentration in the waste. EP toxicity tests revealed maximum total chromium and lead levels in the waste extract of 0.05 and 0.45 ppm, respectively.

B. Agency Analysis and Action

The constituents of concern in this waste are hexavalent chromium and lead. EP extracts from sludge samples analyzed by Keystone show lead and total chromium consistently well below the maximum EP toxicity limits.9 These low leachate levels indicate that the constituents are present in essentially an immobile form. A final pH of 8.3 indicates that Keystone's waste treatment process effectively neutralizes its spent pickle liquor wastes. The Agency, therefore, has granted a temporary exclusion to the Keystone Group's facility in Bartonville, Illinois, for its treated spent pickle liquor, as described in its petition.

IX. Mansfield Products Company

A. Petition for Exclusion

Mansfield Products Company (Mansfield). Mansfield, Ohio, involved in the manufacture of washers, dryers, ranges, and dry cleaning machines, has petitioned the Agency to exclude its treated sludge presently listed as EPA Hazardous Waste No. F006-Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum. The production processes at Mansfield Products which generate the listed hazardous wastes are nickel plating and chromate conversion coating. Mansfield Products has petitioned to exclude its waste because it does not meet the criteria for which it was listed.

Mansfield has submitted a description of its electroplating and wastewater treatment processes, and EP toxicity test results for cadmium, total chromium, and nickel, and a constituent analysis for cyanide.

Mansfield's treatment process involves the batch reduction of chromic rinse waste, lime and polymer neutralization and flocculation, clarification, and vacuum filtration dewatering. Samples were collected over a 2 month period which the petitioner claims to be representative of

any variation of constituent concentration in the waste. EP toxicity tests involving cadmium, total chromium and nickel produced maximum leachate levels of <0.1, 0.1 and 12.8 ppm, respectively. Total constituent analysis for cyanide was of 5.0 ppm.

B. Agency Analysis and Action

The constituents for which EPA
Hazardous Waste No. F006 are listed
are cadmium, hexavalent chromium,
nickel and cyanide. EP extracts show
cadmium and total chromium well
below the EP toxicity limits. 10 Nickel
extract values are also not considered to
be regulatory concern. 11 The reported
cyanide levels are not considered to be
of regulatory concern. The Agency,
therefore, has granted a temporary
exclusion to Mansfield Product's facility
in Mansfield, Ohio, for its treated
wastes, as described in its petition.

X. Gould Incorporated

A. Petition for Exclusion

Gould Incorporated (Gould), involved in the manufacturing of electrical busses, has petitioned the Agency to exclude its wastewater treatment sludge presently listed as EPA Hazardous Waste No. F006-Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/ stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum. Gould has petitioned to exclude its waste because it does not meet the criteria for which it was listed.

Gould's electroplating processes use copper and silver, cadmium, chromium and nickel are claimed not to be used in any of Gould's processes. Production processes used at Gould include nitric acid stripping, copper bright dip, bronze strike, copper plating, silver strike and silver plating. Cyanides are used in these processes, and Gould's treatment

em includes cyanide destruction, equalization, neutralization, caustic precipitation, clarification, lagooned storage, and plate and frame filtraport.

Gould has submitted a description of its wastewater treatment process; EP toxicity test results for cadmium, total chromium, nickel, and cyanide; and total constituent analyses of the sludge for cadmium, total chromium, nickel, and free cyanide.

EP toxicity tests for cadmium, total chromium, and nickel produced maximum leachate concentrations of <0.01, <0.05, 0.26 ppm, respectively. Distilled water leachate tests for cyanide produced a maximum level of 0.059 ppm. Constituent analyses of the wastewater sludge indicated maximum cadmium, total chromium, and cyanide concentrations of 5.4, 56.0 and 118 ppm, respectively.

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B. Agency Analysis and Action

The constituents for which EPA Hazardous Waste No. F006 are listed are cadmium, hexavalent chromium, nickel and cyanide. Gould has demonstrated that its copper, bronze and silver plating operations do not involve the use of cadmium or chromium. The low concentrations of cadmium and chromium in the sludge are probably a result from unknown minor sources of contamination rather than from the direct use of these constituents in the plating process. In addition, EP extracts show cadmium and total chromium 12 levels consistently below the interim primary drinking water standard. With respect to nickel, the petitioner did not provide any specific analysis for nickel in the sludge and therefore, the Agency has no data to support their claims. However, since the level of nickel in the EP extract is not considered to be of regulatory concern. the Agency has not asked the petitioner to provide any additional data. Finally, the level of free cyanide in the dewatered sludge is considered negligible and is therefore, not of regulatory concern.

The concentration of total complexed cyanides, however, is of concern to the Agency. The Agency has data indicating that complexed cyanides if exposed to sunlight may photodecompose to free cyanide (see background documents for EPA Hazardous Wastes F006 and K066). Could has requested to empty their lagoon, and dispose of the sludge at a landfill. Gould has also requested to continue using their lagoon (after it is emptied) for sludge placement. The Agency is not presently at a point where

^{*}Sea Footnote 2.

¹⁸ See footnote 2.

¹¹ In the previous set of delisting petitions which were published in the Federal Register (46 FR 17196 March 18, 1981), the Agency had published an interim nickel loachate level of 10 ppm in considering potitions for exclusion. However, after consideration of additional nickel toxicity data, the Agency is amending the allowable nickel lenchate level from 10 ppm to 20 ppm. By doing this, the Agency now believes that in most cases, the concentration of nickel in the waste extract at less than 20 ppm would not be of regulatory concern. This new level is based in part on the Agency's reevaluation of the nickel water quelly criterion value, with an upward multiplier allowing for some attenuation and dilution of the contaminant.

¹² See Pootnote 2.

Alexand Co

Mel Tidmore, Facilities Manager Mansfield Products Company 94 Sherebrook Road Mansfield, Ohio 44907

SEWHME

Dear Mr. Tidmore:

This is in response to your telephone conversation with Phil Kaplan of my staff on July 13, 1981, regarding the delisting of hazardous waste found at your Mansfield Products Company, Mansfield, Ohio facility. The Enforcement Division is in receipt of a memorandum dated May 18, 1981, from Douglas B. Farnsworth, Chief, Regulatory Branch, Legal Division, Office of Hazardous Waste Enforcement, United States Environmental Protection Agency (U.S. EPA). The memorandum indicates that the U.S. EPA has made a preliminary determination to publish in the Federal Register notice to exclude certain wastes generated at particular facilities from the list in 40 CFR Part 261, Subpart D. These wastes are to be excluded or delisted pursuant to 40 CFR 260.20 and 260.22. The delisting determination includes a waste generated at the Mansfield Products Company, Mansfield facility (EPA ID No. OHDOOD723601) which has an EPA Waste Number FOOG, wastewater treatment sludges from electroplating operations.

Until the delisting of the above waste becomes effective upon publication in the Federal Register, the U.S. EPA will refrain from taking enforcement action under the Resource Conservation and Recovery Act (RCRA), Subtitle C, 42 USC 6901 et seq. and 40 CFR Parts 262 and 265 relating to the handling of such waste. This assurance is conditioned upon the premise that Mansfield Products Company will handle the waste in an environmentally sound manner. Should you have any questions regarding this matter, please call Phil Kaplan at (312) 353-2114.

Very truly yours,

Original Signed by Sandra S. Gardebring

Sandra S. Gardebring Director, Enforcement Division

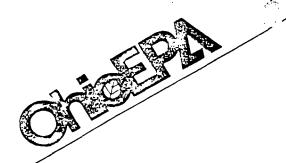
cc: VSteve White, Acting Chief
Office of Hazardous Materials Management
Ohio Environmental Protection Agency

RECEIVED

AUG -3 1981

OHIO EPA N. W. D. O.

cepies/serdto



Re: Richland County

Mansfield Products Co. Stack Test, B906

Mr. M. Tidmore Mænsfield Products Co. 246 E. 4th Street Mansfield, OH 44902 January 27, 1982

Dear Mr. Tidmore:

Review of the #6 boiler stack test, conducted on October 7, 1981, has been completed. At a stream flow of approximately 60,000 lb/hr (rated capacity) an average emission rate of 0.158 lb/mm BTU was achieved versus the allowed emission rate of 0.17 lb/mm BTU. As the testing followed correct proceedure, this test is acceptable for both proceedural and compliance purposes.

Yours truly,

Gerald A. Rich, P.E.

Group Leader, Engineering Services

kar



Form Approved OMB No. 158-R0075



AIR POLLUTANT EMISSIONS REPORT (APER)

DATE REPORT SUBMITTED 4/2/81

SECTION IV - PROCESS/OPERATING DATA PART 3 - FUEL USAGE INFORMATION

FACILITY NAME MANSFIELD PRODUCTS CO.

					PARI	.5 - 1	OEL	USAC	E INFORMA	TION					,	,			
INTERNAL ID CODE FOR	COMBUSTION	10.	FUEL						11 . 	AMO	OUNT OF F	UEL USED			12.	13, F T⊦	UEL SI IROUG	EASON SHPUT	(%)
PROCESS/ OPERATING UNIT	UNIT (See Below) 106 BTU/hr)	a. TYPE	b. HEAT CONTENT (BTU/fuel unit)		ULFUR Max.		LEAD Max,	e. _%	B. ANNU	A L Units	b. Design	HOURL Normal	Y Maximum	Units	EXCESS AIR USED	a. DEC- FEB	b. МАЯ- МАҮ	JUN-	d. SEP- NOV
B-004	72	COAL	12,750		3.0	-	-	9	6,286	Tons	2.77	2.38	2.77	Tons	40	45	12	29	14
B-006	84	11	12,750	2.6	3.0	~	-	9	7,161	11	3.2	2.38	3.2	"	40	42_	0	12	46
B-005	100	NATURAL GAS	1,050	-	-	-	_	-	94,909	MCF	100	40	80	MCF	_	40	15	6	39
						<u> </u>												<u></u>	
P-027	.95	NATURAL GAS	1,050				-		2,900	MCF	.95	.90	.95	MCF_		45	5.	30_	31
P-028	8.3	0	1,050					_	47,350	11	8.3	7.5	8.3	"		45	5	30	31
P-032	8.3	11	1,050	F00T	-	-	-	-	47,350	n	8.3	7.5	8.3	"		45	5	30	31
P-033	.82	H	1,050	65	-	-	-	-	3,300	"	.82	.73	.82	11		45	5	30	31
P-017	2.7	tı	1,050	CUBIC	-	~	-	-	3,500	11	2.7	2.3	2.7	11	-	45	5	30	31
P-021	5.0	l)	1,050	/100	~	-	-	-	6,840	"	5.0	4.5	5.0	п	<u> </u>	45	5	30	31
P-019	5.1	11	1,050	GRAINS	_	_	_	_	7,000]"	4.6	5.4	5.1_	11		45	5	30	31
P-022	10	11	1,050	9 GR		-			12,160	lı .	0	8.0	10	11		45_	5	30	31
P-023	1.5	11	1,050		-	-	-	_	2,280	"	1.5	1.2	1.5	"	_	45	5_	30	31
P-024	1.5	11	1,050		-	_	-	-	2,280	11	1.5	1.2	1.5	н.	_	45	5	30	31
P-012	6.1	n .	1,050		_	_	-	-	3,700	11	6.1	6.1	6.1	II	_	45	5	30	31
											}								

9. SIZE OF COMBUSTION UNIT

11. USE THIS SPACE TO DEFINE THE UNITS USED ABOVE

13. SEASONAL THROUGHPUT

"DEC" in ITEM 6a refers to the year prior to the "CALENDAR YEAR OF RECORD" listed in SECTION I, ITEM 13.

Enter: Maximum Rated Capacity. This Item is not applicable to direct heat transfer units. If the value is not known, see the instructions.



Form Approved OMB No. 158-R0075

. FACILITY NAME

AIR POLLUTANT EMISSIONS REPORT (APER)

DATE REPORT SUBMITTED 4/2/81

SECTION IV – PROCESS/OPERATING DATA PART 2 – INPUT/OUTPUT INFORMATION

MANSFIELD PRODUCTS CO.

NTERNAL ID CODE FOR				7. PROC	ESS/OPEF (See Be	RATIN			IFUIIN			8.	PROCESS/		TING UN Below)	IT OUTP	UTS	
CODE FOR PROCESS/ OPERATING	6. FEED Materials	b. ANNUAL	RATE	c. DAILY	PROCES R	ATE	d. HOUF	LY PRO	CESS RAT	E	REID VAPOR PRESSURE (See Belew)	PRODUCTS	b. ANNUAL	RATE	c. HO	JRLY PR	OCESS RA	TE
UNIT		Amount	Units	Normal	Maximum	Units	Design	Normal	Maximum	Units	PRESSURE (See Belger)	l	Amount	Units	Design	Normal	Maximum	Unit
R-001	POLYCRON PAINT	14,950	Gal.	78.6		Ga 1		9.8	-	Gal.	-	WASHER PARTS	,900,0	Part 000	5 ~	650	750	Par
R-003		5,500	"	28.8	1	"	_	3.6	- !	н		ıı .	475,0	ро "		160	180	"
R-036	11	12,100	11	64.	_	п	-	8.0	_	11	-	RANGE PARTS	550,0	фо "	-	360	400	11
R-005	п	7,000	"	36.8	_	11	_	4.6	-	11	_	DRYER PARTS	,500,0	фо "	-	900	950	"
R-007	п	3,500	"	18.4	-	"	_	2.3	_	11	_	"	475,0	0 0 "	-	300	350	"
R-010	EPON PRIMER	10,000	11	52.8		ıi		6.6	_	"		WASHER PARTS	,900,0	φο "	-	650	750	11
R-011	11	7,209	"	38.4	-	11	_	4.8	_	11	-	DRYER PARTS	,500,0	0 0 "	-	360	400	"
P-002	MORAM GREY	1,320	"	6.88		11	-	.86		n		RANGE PARTS	250,0	00 "	-	303	400	
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anly should under this it	or combustion not be listed on. They are in SECTION IV,	pressure 70° F).	e RVP in psis This ite	PRESSUF In Ibs/In ² , and speci- em is not a se complete	If the rvp fy the corr pplicable	respond to the s	ling tempe storage of	erature (e. solid mate	g. 3.5 @ erials, and	USE T	HIS SPAC	E TO DEFINE T	HE UNITS	USED.	ABOVE		PAGE	1

BEFORE THE

NOV 1 6 1992

OHIO ENVIRONMENTAL PROTECTION AGENCY

In the Matter of:

Case No. 77-AI-117

Mansfield Products Company (Applicant)

Director's Final Findings of Fact, Conclusions of

Law, and Orders

Pursuant to Section 119.06 et seq. of the Ohio Revised Code and the rules of the Ohio Environmental Protection Agency, the Director of the Ohio Environmental Protection Agency makes the following Final Findings of Fact, Conclusions of Law, and Orders:

Findings of Fact

- Mansfield Products Company, hereinafter "the Applicant," filed an application for a Permit to Install a 85.99MM BTU/hour coal-fired boiler in the existing boilerhouse of its Mansfield facility.
- On April 18, 1977, and June 15, 1977, the Director of Environmental Protection issued proposed actions in which he proposed to deny the Applicant's request for a Permit to Install.
- On May 9, 1977, and June 23, 1977, the Applicant filed requests for an adjudication hearing concerning the Director's proposed actions.
- Subsequent to the commencement of the instant adjudicatory proceeding the Applicant completed the installation of Boiler No. 6 in the boilerhouse. As installed this boiler has a multiple-cyclone collector Model No. 6 UPO WHS No. 9-126 which is designed to control particulate matter emissions from Boiler No. 6.
- 5. On April 1, 1982, the parties filed a joint stipulation in the instant case in which it was agreed that a permit to install be issued for Boiler Number 6 to be followed by the issuance of a permit to operate for the boiler. Upon the permits becoming effective, the stipulation stated that the applicant would be deemed to have withdrawn its requests for an adjudication hearing and that this matter would be dismissed.
- On May 4, 1982, the Ohio Environmental Protection Agency issued a proposed permit to install for Boiler Number 6 which was journalized and effective on June 18, 1982.
- On September 1, 1982, the Ohio Environmental Protection Agency issued a final permit to operate for Boiler Number 6.

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

Morman Date 11/16/82

State of Ohio Environmental Protection Agency

Permit

Terms and some

Contaminant Source

Date of Issuance		Application Nu	umber_	0370010182	K002	
Effective Date (upon U	SEPA approval)	Permit Fee \$1				
	s issuance to: Mans: 246	field Products Company E. Fourth Street field, Ohio 44902				
of a permit to operate:	Large Appliance	-				
The following terms and	conditions are hereb	y expressly incorporated into	o this p	ermit to operate	:	
Condition 1						
The above described air operated, in full complian	contaminant source ce with all applicable	is now operating, and over the state and federal laws and reg	the peri gulation	iod covered by	the pern	nit will be
Condition 2						
the amount of any air pol	lutant emitted, or resu	ne method of operation of, this ults in the emission of any air mental Protection Agency (See	polluta	nt not previously	/ emitted	l, a permit
premises of the source of the premises for the p	peration at any reaso urpose of making ins minants and determin	ection Agency, or his authori nable time and subject to safe pections, conducting tests, ex ing compliance with all applic of this permit.	fety req xaminir	uirements of the	person	in control rtaining to
Condition 4 (This conditio	n applicable if check	ed: [])				
Upon declaration of an A hose emission reduction source.	Air Pollution Alert, Wi procedures enumera	arning or Emergency Episode ated in the Emergency Action	le this a on Plan	air contaminant approved by the	source v e Direct	will follow or for this
Condition 5		(3 years after				•
This permit to operate sha	all be effective until	final approval by USEPA) permit. If you are not contact	i be con	tacted approximate	tely six m	nonths
	ig the renewal or this	permit. If you are not contac	stea, pit	ease write to this	s agency	,.
Condition 6	t annuitied chave mu	nt ha samittad within fiftaan (45	E) dava	of the officiative	data of th	nie nermit
	t specified above mus	st be remitted within fifteen (15	o, days	of the effective (Jale Of th	ns permit.
Condition 7 Any transferee of this permit nust be notified in writing		me the responsibilities of the orig	iginal pe	ermit holder-transf	eror. The	Ohio EPA
Condition 8 (This condition	•			Ohia Environmental	Pretectio	n Agency
This permit is subject to				ENTERED DIREC		
OHIO ENVIRONMENTAL	PROTECTION AGEN	I certify this to be a true official document as filed Environmental Protection of By:	Agency	records or an	of the	EPA 3834
				/		4/12/78

April 12, 1985

Certified Mail

Mr. Larry Kertcher Chief, Air Compliance Branch U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION V 230 S. Dearborn St. Chicago, IL 60604

RE: MANSFIELD PRODUCTS COMPANY, MANSFIELD, OH, ACB-26

Dear Mr. Kertcher:

This letter supersedes my letter of March 6, 1985.

Attached is the information required, as per request of David Kee, Director Air Management Division, dated January 29, 1985.

Coating Lines K001, K002, K003, K004, K005, K007, and K008, through elimination and combination, are now represented by:

- KOO1 2nd Floor Finish Line, Multiple Loop Electrostatic Discs 2nd Floor Finish Line, Electrostatic Hand Touch-Up 2nd Floor Finish Oven
- K002 2nd Floor Primer Line, Waterborne Primer Flow-Coater 2nd Floor Primer Oven
- K003 4th Floor Finish Line, Multiple Loop Electrostatic Discs 4th Floor Finish Line, Electrostatic Hand Touch-Up 4th Floor Finish Oven
- K004 D-4 Paint Line Source shut down for several years.
- K005 3rd Floor Manual Finish Line, Electrostatic Hand Painting 3rd Floor Finish Oven
- K007 1st Floor Primer Line Source shut down 1983.
- K008 5th Floor Primer Line, Waterborne Primer Flow-Coater 5th Floor Prime Oven

Active Emission Systems at Mansfield Products Company:

K001, K002, K003, K005 and K008 - Same as above.

...Continued

The following equipment, paint, and process modifications, with the express purpose of volatile organic compound emission reduction, have taken place at Mansfield Products Company:

1st Floor - Both gray dip paint system and Black Japan paint system were eliminated.

- 2nd Floor 1. Epon primer (solvent base) was changed to waterborne primer. (1983)
 - 2. Ransburg electrostatic rotating disc equipment (4 stations) was modified to assure greater paint thickness control by addition of D.C. control paint pump motors. (1983)
 - 3. Close clearance paint pumps were added to prevent paint bypass during painting operations. (1983)
 - 4. Ransburg drive motors were changed from 1800 RPM to 3600 RPM with flat rotating discs being changed to deep well discs. Both changes gave finer paint dispersion with increased transfer efficiencies. (1983)
 - 5. Omega Loops (4) were replaced with smaller diameter loops moving ware to be painted close to electrostatic discs. This increased transfer efficiencies and reduced paint and solvent usage. (1984)
 - 6. Devilbiss air atomized hand touch-up guns were replaced with Nordson electrostatic hand guns. (1984)
 - 7. PPG Duracron paint, having 58.3% solids by weight, was changed to PPG Polycron Hi-Solids paint having 68.6% solids by weight. (1984)
- 3rd Floor 1. Devilbiss air atomized hand touch-up guns were replaced with Nordson electrostatic hand guns. (1984)
 - 2. PPG Duracron paint, having 58.3% by weight of solids, was changed to PPG Polycron Hi-Solids paint, having 68.6% by weight of solids. (1984)
- 4th Floor 1. Ransburg electrostatic rotating disc equipment (4 stations) was modified to assure greater paint thickness control by addition of D.C. control paint pump motors. (1983)
 - 2. Close clearance paint pumps were added to prevent paint bypass during painting operations. (1983)
 - Ransburg drive motors were changed from 1800 RPM to 3600 RPM with flat rotating discs being changed to deep well discs. Both changes gave finer paint dispersion, with increased transfer efficiencies. (1983)
 - 4. Omega Loops (4) were replaced with smaller diameter loops moving ware to be painted close to electrostatic discs. This increased transfer efficiencies and reduced paint and solvent usage. (1984)
 - 5. Devilbiss air atomized hand touch-up guns were replaced with Nordson electrostatic hand guns. (1984)
 - 6. PPG Duracron paint, having 58.3% solids by weight, was changed to PPG Polycron Hi-Solids paint, having 68.6% solids by weight. (1984)

U.S. E.P.A. April 12, 1985 Page 3

5th Floor - 1. Epon primer (solvent base) was changed towaterborne primer. (1983)

Attached is a copy of PPG's chemical composition of volatiles, requesting business confidentiality claim for solvent components of water reducible primer paint, Duracron paint, and hi-solids Polycron paint.

If Mansfield Products Company can be of further assistance, please notify the writer.

Very truly yours,

MANSFIELD PRODUCTS COMPANY

Robert E. Corbett, Manager

Manufacturing Engineering

•

Attachments

.

cc: WCI-Cleveland - R. E. Hill

cc: MPC - W. L. Houck, T. J. Byrne

cc: OHIO E.P.A., Air Pollution Control, P.O. Box 1049, Columbus, OH 43216-1049 Charles Taylor, Chief

cc: U.S. E.P.A., Region V, 230 S. Dearborn St., Chicago, IL 60604 Dr. Frank Ekman, Air Compliance Branch

PUBLIC NOTICE

OHIO ENVIRONMENTAL PROTECTION AGENCY

Draft Variance(s) to Operate
and
Proposed State Implementation Plan

Mansfield Products Company

PUBLIC HEARING

Public Notice is hereby given that on August 7, 1986, the Ohio Environmental Protection Agency (Ohio EPA) issued to Mansfield Products Company, 246 E. Fourth Street, Mansfield, Ohio 44902, the draft variance(s): Application #0370010182 K002 and K005. The variance(s) to operate will become effective upon approval by U.S. Environmental Protection agency as a revision to the Ohio State Implementation Plan.

The company operates a primer flowcoat line (K002) and a manual electrostatic spray line (K005) which are subject to the VOC emission requirements of OAc rule 3745-21-09(K). This draft variance to operate allows the company to employ a "bubble" control strategy for these lines (K002 and K005) in lieu of complying with OAC rule 3745-21-09(K). Under this control strategy: (a) K002 shall not exceed 2.62 lbs of VOC per gallon of coatings employed, excluding water, and the transfer efficiency of coatings employed shall not be less than 85 percent; and (b) K005 shall not exceed 3.45 lbs of VOC per gallon of coating employed, excluding water and the transfer efficiency of coatings employed shall not be less than 60%.

Notice is also given that, pursuant to Section 110 of the Clean Air Act and 40 CFR 51.4, the State of Ohio is proposing to revise the State Implementation Plan for Ozone to provide for this variance(s) to operate.

A public hearing to consider comment on the draft variance to operate and the proposed revision to the State Implementation Plan will be held as shown below.

DATE: Monday, September 22, 1986

TIME: 10:00 a.m.

PLACE: Mansfield-Richland Health Dept., 600 West Third

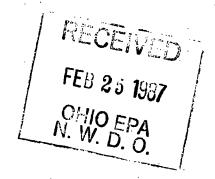
Street, Mansfield, Ohio 44901

47

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

February 24, 1987

Mr. Donald R. Majewski Environmental Scientist OHIO E.P.A. Northwest District Office 1035 Devlac Grove Drive Bowling Green, OH 43402



Dear Mr. Majewski:

As set forth in Mansfield Products Company Permit 21C00003XDD, Part II, Section E, Total Toxic Organic Provisions, the October-November-December 1986 Quarterly Monitor Report is being submitted.

The Total Toxic Organic Sample was taken December 16, 1986, and the sample was analyzed by AquaTech EnvironmentalConsultants, Inc. All the priority pollutant volatile fractions were below detectable limits expressed as UG/L.

If there are any questions, feel free to call.

Very truly yours,

MANSFIELD PRODUCTS COMPANY

F. A. Ade, Manager Manufacturing Services (419) 755-6485

cc: WCI Appliance Center, P.O. Box 182056, Columbus, OH 43218 - Mr. Dan Marques

cc: MPC - Mr. W. A. Wood



AQUATECE ENVIRONVIENTAL CONSULTANTS, INC.

*P.O. BOX 76, STATE ROUTE 100, MELMORE, OHIO 44845, (419) 397-2222
P.O. BOX 436, 181 S. MAIN ST., MARION, OHIO 43302, (614) 382-5991

February 17, 1987

Mr. William Wood Mansfield Products 246 E. 4th Street Mansfield, OH 44903

Dear Mr. Wood:

The attached tables summarize the analytical data for Total Toxic Organics.

Any questions please give me a call at (419) 397-2659.

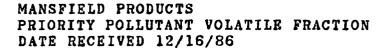
Sincerely,

Robert S. Glowacky / ko

Melmore Laboratory Manager

ks ·

c:



ATEC SAMPLE NO.	13403	
CLIENT SAMPLE DATE	12/16/86	
AGRATISTN		
ACROLEIN	< 100	
ACRYLONITRILE	< 100	
BENZENE	< 5.0	
BROMOFORM CARRON TETRACULORINE	< 10	
CARBON TETRACHLORIDE	< 5.0	
CHLOROBENZENE	< 5.0	
CHLORODIBROMOMETHANE CHLOROETHANE	< 5.0	
2-CHLOROETHYL VINYL ETHER	< 10	
CHLOROFORM	< 10	
DICHLOROBROMOMETHANE	< 5.0	
DICHLORODIFLUOROMETHANE	< 5.0	
1,1-DICHLOROETHANE	< 10	
1,1-DICHLOROETHANE	< 5.0	
1.1-DICHLOROETHYLENE	< 5.0 < 5.0	
1, 2-DICHLOROPROPANE	< 5.0	
cis-1,3-DICHLOROPROPENE	< 5.0	
trans-1,3-DICHLOROPROPENE	< 5.0	
ETHYL BENZENE	< 5.0	
METHYL BROMIDE	< 10	
METHYL CHLORIDE	< 10	
METHYLENE CHLORIDE	< 5.0	,
1.1.2.2-TETRACHLOROETHANE	< 5.0	
TETRACHLOROETHYLENE		
TOLUENE	< 5.0	
trans-1.2-DICHLOROETHYLENE	< 5.0	
1,1,1-TRICHLOROETHANE	< 5.0 < 5.0	
1,1,2-TRICHLOROETHANE	< 5.0 < 5.0	
TRICHLOROETHYLENE	< 5.0 < 5.0	
TRICHLOROFLUOROMETHANE	< 10	
VINYL CHLORIDE	< 10	
TIME ORDORIUS	· · · · · · · · · · · · · · · · · · ·	

ALL RESULTS EXPRESSED AS UG/L.

MANSFIELD PRODUCTS
PRIORITY POLLUTANT BASE-NEUTRAL FRACTION
DATE RECEIVED 12/17/86

ATEC SAMPLE NO. CLIENT SAMPLE DATE	13403 12/16/86
ACENAPHTHENE	< 1.0
ACENAPHTHYLENE	< 1.0
ANTHRACENE	< 1.0
BENZIDINE	< 5.0
BENZO(a) ANTHRACENE	< 2.0
BENZO(a) PYRENE	⟨ 3.0
BENZO(b) FLUORANTHENE	₹ 3.0
BENZO(k) FLUORANTHENE	₹ 3.0
BENZO(ghi)PERYLENE	⟨ 3.0
bis(2-CHLOROETHOXY) METHANE	₹ 3.0
bis(2-CHLOROETHYL)ETHER	< 5.0
bis(2-CHLOROISOPROPYL)ETHER	< 5.0
bis(2-ETHYLHEXYL)PHTHALATE	⟨ 2.0
4-BROMOPHENYL PHENYL ETHER	₹ 2.0
BUTYL BENZYL PHTHALATE	⟨ 2.0
2-CHLORONAPHTHALENE	< 2.0
4-CHLOROPHENYL PHENYL ETHER	< 2.0
CHRYSENE	< 2.0
DIBENZO(a, h) ANTHRACENE	⟨ 3.0
o-DICHLOROBENZENE	⟨ 3.0
m-DICHLOROBENZENE	< 3.0
P-DICHLOROBENZENE	< 3.0
3,3'-DICHLOROBENZIDINE	< 5.0
DIETHYL PHTHALATE	⟨ 2.0
DIMETHYL PHTHALATE	⟨ 2.0
DI-n-BUTYL PHTHALATE	⟨ 2.0
2,4-DINITROTOLUENE	< 5.0
2,6-DINITROTOLUENE	< 5.0
DI-n-OCTYL PHTHALATE	< 2.0
1.2-DIPHENYLHYDRAZINE	< 5.0
FLUORANTHENE	⟨ 2.0
FLUORENE	< 1.0
HEXACHLOROBENZENE	
HEXACHLOROBUTADIENE	< 5.0 < 3.0
HEXACHLOROCYCLOPENTADIENE	< 10.0 < 5.0
HEXACHLOROETHANE	< 10.0
INDENO(1,2,3-cd)PYRENE	
ISOPHORONE	< 3.0
NAPHTHALENE	< 3.0 < 1.0
NITROBENZENE	< 10.0
N-NITROSODIMETHLYAMINE	< 10.0
N-NIROSO-n-PROPYLAMINE	< 5.0
N-NITROSODIPHENYLAMINE	< 5.0 < 5.0
PHENANTHRENE	< 1.0
PYRENE	< 2.0
1 9 ATDICHIODODENZENE	4 9 9
1,2,4-IntonborobenZene	\ 3. U

MANSFIELD PRODUCTS
PRIORITY POLLUTANT ACID FRACTION
DATE RECEIVED 12/17/86

ATEC SAMPLE NO. CLIENT SAMPLE DATE	13403 12/16/86
2-CHLOROPHENOL	< 10.0
2,4-DICHLOROPHENOL	< 20.0
2,4-DIMETHYLPHENOL	< 10.0
4,6-DINITRO-O-CRESOL	< 10.0
2.4-DINITROPHENOL	< 10.0
2-NITROPHENOL	< 10.0
4-NITROPHENOL	< 20.0
P-CHLORO-M-CRESOL	< 10.0
PENTACHLOROPHENOL	< 10.0
PHENOL	< 10.0
2,4,6-TRICHLOROPHENOL	< 10.0

ALL RESULTS EXPRESSED AS UG/L.



May 6, 1983

Mr. Rob Reash Environmental Biology Program Ohio State University 1735 Neil Avenue Columbus, OH 43210

Dear Mr. Reash:

We received your letter concerning the White Westinghouse plant in Mansfield. Our investigation revealed the clarifier at the plant had a gear failure, which drove the sludge collector sweep. The east clarifier was then utilized as a back-up clarifier as defined in their Operation Manual. However, the inlet to the center well was plugged. The plant personnel then fed the east clarifier from the side. This emergency action resulted in excess turbulence at the influent entrance, which caused the reddish-brown discharge. Lastly, the company hauled 11,000 gallons of sludge to a disposal site at a cost of \$4,000.00. The worm gear cost \$2,400.00. It is my opinion that the White Westinghouse Company did everything that was humanly possible, except notify our agency. We have discussed notification with the plant and our legal staff. Additionally, the US EPA Region V office in Chicago was notified.

Your concern for the environment is appreciated very much.

In the future should you detect an environmental emergency, please call this 24 hour emergency response number -- 1-800-282-9378.

Lastly, I would like to wish you success in your field and with your project on the Rocky Fork.

Sincerely,

Paul G. Brock

District Engineer

Hand I Brent

PGB/kb

cc: File



OSU

1735 Neil Avenue Columbus, Ohio 43210 Phone 614 422-5306 614 422-8772

Mr. Paul Brock Ohio EPA Northwest District Office 1035 Tevlac Grove Dr. Bowling Green, Ohio 43402

Dear Mr. Brock,

My name is Rob Reash. I am a graduate student in the Environmental Biology Program at the Chio State University. As you may have remembered from our conversation a couple of months back, I am studying the effects of chronic pollution upon the fishes in the Rocky Fork stream, which flows through Mansfield. I indicated to you that I had witnessed the White-Westinghouse effluent discharge on 28 January 1983.

Below, I have indicated the metal concentrations of water samples taken at an upstream and downstream site on 28 January 1983. If my memory is correct, I believe I gave you routine water chemistry information over the telephone. As you can see, the discharge must have contained high concentrations of iron and zinc. All metals were determined by flame atomic absorption spectrophotometry.

·		Total metal	concentrat	ion (ug/l)
Site	Cr	Fe	Ni	Zn
Longview Ave. (upstream of W-W effluent)	150	980	90	20
Illinois Ave. (downstream of W-W effluent)	20	3,230	ND	2,570

I apologize for taking so long in sending you these results - I was plagued by delays beyond my control. If you need additional data concerning water chemistry, I would be glad to share any of my findings. You can leave a message (614-422-1311) or just write.

Respectfully, Rol, Reash



Re: Richland County

Mansfield Products

OEPA Permit No. 2ICO0003

July 22, 1983

Mr. M. W. Tidmore
Facilities Manager
Mansfield Products Company
A Division of White-Westinghouse
Corporation
246 East Fourth Street
Mansfield, OH 44902

Dear Mr. Tidmore:

Our review of the May 1983, monthly operating report for the Mansfield Products Company revealed the following violations:

<u>Date</u>	<u>Outfall</u>	Parameter	Value Reported	Value Permitted
5/2/83	001	Nickel	1540 ug/l	1000 ug/l
5/16/83	001	Nickel	1400 ug/l	1000 ug/l
May Average	001	Nickel	866 ug/l	500 ug/l

We have not received any communication concerning these violations. Please resolve these problems. Should you have any questions, please do not hesitate to contact our office.

Sincerely,

Paul G. Brock

Environmental Engineer II

Rul of There

PGB/kb

cc: Robert Phelps, Manager, IWW, CO





Re: Richland County

Hazardous Waste Mansfield Products

OHD000723601

Mr. Bill Wood Mansfield Products Company 246 East Fourth Street Mansfield, OH 44902 June 13, 1984

Dear Mr. Wood:

On June 12, 1984, Kevin Clouse, Ohio EPA, Northwest District Office, conducted an inspection of your facility which was represented by yourself. At that time the following deficiencies were noted as referenced by the enclosed inspection form:

Part 2 (5)

The generator needs to label and placard all hazardous waste prior to transport as required by 40 CFR 262.30 through 262.33.

Part 2 (8)(9)

All employee training must be carried out and an annual refresher course offered at the facility. Employee training must be documented along with written job titles and descriptions for all personnel involved in hazardous waste activities as required under 40 CFR 265.16(a-e). This is a requirement of the Ohio Administrative Code (OAC) 3745-65-16(a-e).

Subpart D (1-4)

The facility needs to prepare a written contingency plan. Please address all points specified in the enclosed inspection form to meet the regulations set by 40 CFR 265.51 through 265.56. This is a requirement of OAC 3745-65-52 through 3745-65-56.

Subpart I (2)

All containers used to store hazardous waste should be closed as required by CFR 265.173(a). A requirement of OAC 3745-66-73(A).

Mr. Bill Wood June 13, 1984 Page 2

Please send corrections to the above stated deficiencies within 30 days of the date of this letter. If you have any questions about the inspection, please call me at (419) 352-8461.

Sincerely,

Kevin C. Clouse

Environmental Scientist

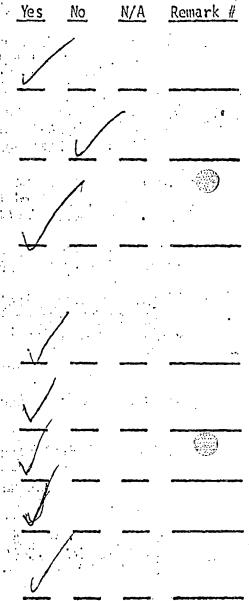
KCC/kb

Enclosure

cc: Paula Cotter, DSHWM, CO

PART 2. GENERATOR REQUIREMENTS

- 1. The hazardous waste(s) generated at this facility have been tested or are acknowledged to be hazardous waste(s) as defined in Section 261 and in compliance with the requirements of Sections 262.11.
- 2. Does this facility generate any hazardous wastes that are excluded from regulation under Section 261.4 (statutory exclusions) or Section 261.6 (recycle/reuse)?
- 3. Does this facility have waste or waste treatment equipment that is excluded from regulation because of totally enclosed treatment (Section 265.1(c)(9)) or via operation of an elementary neutralization unit and/or wastewater treatment unit (Section 265.1(c)(10)).
- 4. The generator meets the following requirements with respect to the preparation, use and retention of the hazardous waste manifest:
 - a) The manifest form used contains all of the information required by Section 262.21(a) and (b) and the minimum number of copies required by Section 262.22.
 - b) The generator has designated at least one permitted disposal facility and has/will designate an alternate facility or instructions to return waste in compliance with Section 262.20.
 - c) Prepared manifests have been signed by the generator and initial transporter in compliance with Section 262.23.
 - d) The generator has complied with manifest exception reporting requirements (investigate after 35 days, report after 45 days) in Section 262.42(a), (b)
 - e) Signed copies of all hazardous waste manifests and any documentation required for Exception Reports are retained for at least 3 years as required by Section 262.40.



	•		Yes	No	N/A	Remark
5.	The	generator meets the following hazardous waste pre-transport requirements:				D005 W
	a)	Prior to offering hazardous wastes for transport off-site the waste material is packaged, labeled and marked in accord with applicable DOT regulations (Section 262.30, 262.31 and 262.32(a))		\checkmark		BASSELS W NOT CHECK
	b)	Prior to offering hazardous wastes for transport off-site each container with a capacity of 110 gallons (416 liters) or less is affixed with a completed hazardous waste label as required by Section 262.32(b).	Since	$\sqrt{}$		CHACK
	c)	The generator meets requirements for properly placarding or offering to properly placard the initial transporter of the waste material in compliance with Section 262.33.	<u>/</u>		(surface)	· · · · · · · · · · · · · · · · · · ·
6.		ardous wastes imported from or exported to foreign countries are handled accordance with the requirements of Section 262.50.			1	· · ·
7.	tan	the generator elects to store hazardous waste on-site in <u>containers</u> or ks for <u>90 days</u> or less without a RCRA storage permit as provided under tion 262.34, the following requirements with respect to such storage are met:				· · · · · · · · · · · · · · · · · · ·
	a)	The containers are clearly marked with the words "Hazardous Waste".	1/			·
•	b)	The date that accumulation began is clearly marked on each container.		:		:
8.	Sec	generator has provided a Personnel Training Program in compliance with tion 265.16(a)(b)(c) including instruction in safe equipment operation is emergency response procedures, training new employees within 6 months is providing an annual training program refresher course (Section 262.34).	1		distribution (
9.	inc	e generator keeps all of the records required by Section 265.16(d)(e) cluding written job titles, job descriptions and documented employee aining records (Section 262.34).				
٠.	. •		;	•	•	;

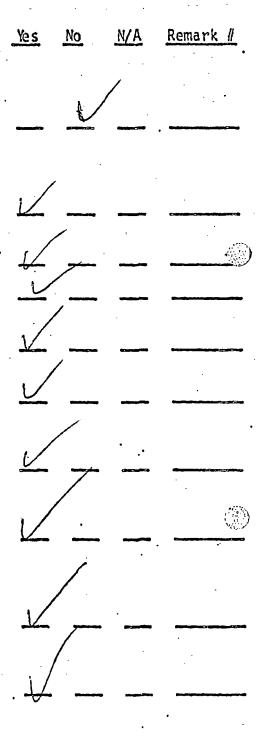
RCRA INTERIM STATUS INSPECTION FORM



		· · · · · · · · · · · · · · · · · · ·					
٠.		RCRA INTERIM STATUS INSPECTION FORM	•	1.0			
		Subpart D: Contingency and Emergency	ienal Yes	No	<u>N/A</u>	Remark	<u>//</u>
•	fire	facility has a written Contingency Plan designed to minimize hazards from es, explosions or unplanned releases of hazardous wastes (265.51) and tains the following components:	•	· · · · / · ·	. .		
	a)	Actions to be taken by personnel in the event of an emergency incident.		V			· ~~
	b)	Arrangements or agreements with local or state emergency authorities.	-	1/		***************************************	-
(Names, addresses and telephone numbers of all persons qualified to act as emergency coordinator.	- Contraction	V			-
•		A list of all emergency equipment including location, physical description and outline of capabilities.		_	tjaneling.		
	e)	If required due to the actual hazards associated with the waste(s) handled, an evacuation plan for facility personnel. (265.51(f))	Participa	1			cada
	ha s	been submitted to all local and state emergency service authorities that it be required to participate in the execution of the plan. (265.53)	•	1	-		 -
3.		plan is revised in response to facility, equipment and personnel changes failure of the plan. (265.54)	Compressor			T	- .633\
	am i	emergency coordinator is designated at all times (on-site or on-call) is iliar with all aspects of site operation and emergency procedures and has authority to implement all aspects of the Contingency Plan. (265.56)		<u>/</u>			· · · · · · · · · · · · · · · · · · ·
5.	all	an emergency situation has occurred, the emergency coordinator has implemented or part of the Contingency Plan and has taken all of the actions and made all the notifications deemed necessary under Sections 265.56.	No.				unte s

Subpart C: Preparedness and Prevention

- 1. Has there been a fire, explosion or non-planned release of hazardous waste at this facility? (265.31)
- 2. If required due to actual hazards associated with the waste material, the facility has the following equipment: (265.32)
 - a) Internal alarm system.
 - b) Access to telephone, radio or other device for summoning emergency assistance.
 - c) Portable fire control equipment.
 - d) Water at adequate volume and pressure via hoses sprinkler, foamers or sprayers.
- 3. All required safety, fire and communications equipment is tested and maintained as necessary; testing and maintenance are documented. (265.33)
- 4. If required due to the actual hazards associated with the waste material, personnel have immediate access to an emergency communication device during times when hazardous waste is being physically handled. (265.34)
- 5. If required due to the actual hazards associated with the waste material, adequate aisle space to allow unobstructed movement or emergency or spill control equipment is maintained. (265.35)
- 6. If required due to the actual hazards associated with the waste material, the facility has attempted to make appropriate arrangements with local emergency service authorities to familiarize them with the possible hazards and the facility layout. (265.37(a)
- 7. Where state or local emergency service authorities have declined to enter into any proposed special arrangements or agreements the refusal has been documented. (265.37(b)



PART 5. TREATMENT/STORAGE/DISPOSAL

SUBPARTS INCLUDED

I: Management of Containers

J: Management of Tanks

K: Surface Impoundments

"L: Waste Piles

M: Land Treatment

N: Landfills

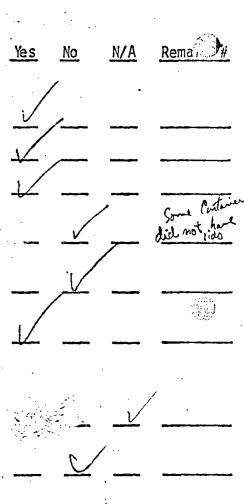
0: Incinerators

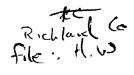
P: Thermal Treatment

Q: Chemical/Physical/Biological Treatment

Subpart I: Management of Containers

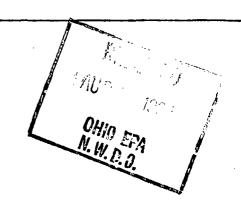
- 1. Hazardous wastes are stored in containers which are:
 - a) Closed (265.173)
 - b) In good physical condition (265.171)
 - c) Compatible with the wastes stored in them (265.172)
 - Containers are stored closed except when it is necessary to add or remove wastes. (265.173(a))
 - 3. Hazardous waste containers are not stored, handled or opened in a manner which may rupture the container or cause it to leak. (265.173(b))
 - 4. The area where containers are stored is inspected for evidence of leaks or corrosion at least weekly and such inspections are documented. (265.174)
 - 5. Containers holding Ignitable or Reactive waste(s) are located at least 50 feet (15 meters) from the property line and the general requirements for handling such wastes in Section 265.17 (physical separation, signs and safety) are met (265.176).
 - 6. Containers holding hazardous wastes are never stored near other materials which may interact with the waste in a hazardous manner. (265.177(c)





August 10, 1984

Mr. Kevin Clouse, Environmental Scientist OHIO ENVIRONMENTAL PROTECTION AGENCY Northwest District Office 1035 Devlac Grove Drive Bowling Green, OH 43402-4598



REF: RICHLAND COUNTY HAZARDOUS WASTE MANSFIELD PRODUCTS CO. OHDOO0723601

Dear Mr. Clouse:

This is the written response to the June 12, 1984 inspection at Mansfield Products Company, and your letter dated June 13, 1984 outlining deficiencies as noted in the inspection form. The response follows in order to the items set forth in your letter of June 13, 1984:

PART 2(5)

The generator will label and placard all hazardous waste prior to transport. The D005 barrels in the Vit Plant are being labeled as required.

PART 2 (8)(9)

An employee training program and an annual refresher course will be offered for all personnel involved in hazardous waste activities, and the training sessions will be documented.

SUB-PART D (1-4)

A written contingency plan has been written and is attached.

SUB-PART (2)

All containers used to store hazardous waste will be closed when filled. The barrels containing D005 hazardous waste (Enamel Floor Sweepings) now have lids or are closed.

Mansfield Products Company, as we understand them, has corrected the deficiencies as set forth in your letter of June 28, 1984. We will not obtain a permit to haul hazardous wastes. We will hire a hauler who has the proper permit. If there are any questions, feel free to call.

Very truly yours,

MANSFIELD PRODUCTS COMPANY

W. A. Wood, Supervisor

Plant Engineering

Attachment

cc: WCI-Cleveland - R. E. Hill

cc: MPC - W. L. Houck, A. L. Kelley

HAZARDOUS WASTE CONTINGENCY PLAN (PREPARED BY W. A. WOOD, JUNE 28, 1984)

MANSFIELD PRODUCTS COMPANY 246 E. Fourth St. Mansfield, OH 44902 (419) 755-6333

IN-PLANT EMERGENCY TELEPHONE NUMBERS

NAME	TITLE	EXT.	HOME
W. L. Houck J. P. Clerkin J. Elkins S. E. Cox G. R. Crawford D. E. Downs J. Meadows W. A. Wood	Mgr., Mfg. Services Maintenance Superintendent Maint. Foreman - 2nd Maint. Foreman - 3rd Supvr., Waste Treatment Maint. Foreman - 1st Fire Marshal Supvr., Plant Engineering	486 281 354 354 481 354 351 232	Call Plant Guard, Ext. 333. Plant Guard to contact employees at home when required.
Plant Guard		333	

The above listed personnel are to be notified and are qualified to take action in the event of an emergency incident. They will respond to minimize hazards from fires, explosions, or unplanned release of hazardous wastes.

HAZARDOUS WASTE

Mansfield Products Company generates two types of hazardous wastes:

1. Enamel Floor Sweepings, generated in X-Building and Mill Room. The material is the dried or moist enamel dust-like material which is inert, will not burn or explode. It is declared hazardous because the material fails the EP Toxicity Test for normal landfill disposal. The enamel floor sweepings exceed the Barium allowable limit; therefore, are classified as D005, and are to be handled and disposed of as a hazardous waste.

The floor sweepings are to be placed in a 55-gallon drum. When the drum is full, a lid is to be installed on the drum. The approved label is to be placed on the drum, properly filled out and dated.

GENERATOR NUMBER OHD000723601 CLASSIFICATION D005

The drums are to be stored (less than six months) for disposal.

Fire - Does not apply. Explosion - Does not apply.

Unplanned Release

Care must be taken to dispose of the Floor Sweepings in drums; thus, all Floor Sweepings must be placed in the drums. If a drum leaks, or is spilled, the material must be swept up and placed in another approved drum.

2. Trichloroethane, or Trichlorethylene Waste, will be tagged by the department using it before moving to the Salvage Department for temporary storage.

In case of accidental spill, the liquid will be kept out of drains by containing with Quick-Dri, or similar material. Call the Maintenance Foreman to take the necessary action to clean up the spilled liquid. The liquid will not burn or explode.

Drums are to be kept closed. Approved labels will be installed on drum body and top. Weekly inspections will be completed and documented.

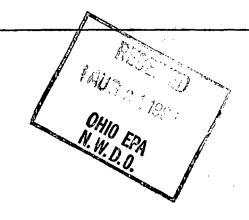


MANSFIELD PRODUCTS COMPANY



August 20, 1984

Mr. Kevin Clouse Environmental Specialist OHIO ENVIRONMENTAL PROTECTION AGENCY Northwest District Office 1035 Devlac Grove Drive Bowling Green, OH 43402-4598



MANSFIELD PRODUCTS CO. OHDOO0723601

REF: RICHLAND COUNTY HAZARDOUS WASTE

Dear Mr. Clouse:

Please refer to my letter to you dated August 10, 1984.

Attached is a corrected copy of our Hazardous Waste Contingency Plan.

The only correction is under No. 1 - Drums are to be stored (less than 90 days) for disposal, rather than less than six months.

Very truly yours,

MANSFIELD PRODUCTS COMPANY

W. A. Wood, Supervisor

Plant Engineering

Attachment

cc: WCI-Cleveland - R. E. Hill

cc: MPC - W. L. Houck, A. L. Kelley

HAZARDOUS WASTE CONTINGENCY PLAN (PREPARED BY W. A. WOOD, JUNE 28, 1984)

MANSFIELD PRODUCTS COMPANY 246 E. Fourth St. Mansfield, OH 44902 (419) 755-6333

IN-PLANT EMERGENCY TELEPHONE NUMBERS

NAME	TITLE	EXT.	HOME
W. L. Houck J. P. Clerkin J. Elkins S. E. Cox G. R. Crawford D. E. Downs J. Meadows W. A. Wood Plant Guard	Mgr., Mfg. Services Maintenance Superintendent Maint. Foreman - 2nd Maint. Foreman - 3rd Supvr., Waste Treatment Maint. Foreman - 1st Fire Marshal Supvr., Plant Engineering	486 281 354 354 481 354 351 232	Call Plant Guard, Ext. 333. Plant Guard to contact employees at home when required.

The above listed personnel are to be notified and are qualified to take action in the event of an emergency incident. They will respond to minimize hazards from fires, explosions, or unplanned release of hazardous wastes.

HAZARDOUS WASTE

Mansfield Products Company generates two types of hazardous wastes:

1. Enamel Floor Sweepings, generated in X-Building and Mill Room. The material is the dried or moist enamel dust-like material which is inert, will not burn or explode. It is declared hazardous because the material fails the EP Toxicity Test for normal landfill disposal. The enamel floor sweepings exceed the Barium allowable limit; therefore, are classified as D005, and are to be handled and disposed of as a hazardous waste.

The floor sweepings are to be placed in a 55-gallon drum. When the drum is full, a lid is to be installed on the drum. The approved label is to be placed on the drum, properly filled out and dated.

GENERATOR NUMBER OHD000723601 CLASSIFICATION D005

The drums are to be stored (less than 90 days) for disposal.

Fire - Does not apply. Explosion - Does not apply.

Unplanned Release

Care must be taken to dispose of the Floor Sweepings in drums; thus, all Floor Sweepings must be placed in the drums. If a drum leaks, or is spilled, the material must be swept up and placed in another approved drum.

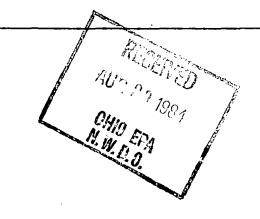
 Trichloroethane, or Trichlorethylene Waste, will be tagged by the department using it before moving to the Salvage Department for temporary storage.

In case of accidental spill, the liquid will be kept out of drains by containing with Quick-Dri, or similar material. Call the Maintenance Foreman to take the necessary action to clean up the spilled liquid. The liquid will not burn or explode.

Drums are to be kept closed. Approved labels will be installed on drum body and top. Weekly inspections will be completed and documented.

August 28, 1984

Mr. Kevin Clouse Environmental Scientist OHIO E.P.A. Northwest District Office 1035 Devlac Grove Drive Bowling Green, OH 43402-4598



file: Pichand

RE: RICHLAND COUNTY HAZARDOUS WASTE

MANSFIELD PRODUCTS CO. - OHDOO0723601

Dear Mr. Clouse:

Attached is a revised Hazardous Waste Contingency Plan which includes phone numbers in the section pertaining to liquid spills.

Very truly yours,

MANSFIELD PRODUCTS COMPANY

W. A. Wood

Supervisor

Plant Engineering

Attachment

cc: WCI-Cleveland - R. E. Hill MPC - W. L. Houck, A. L. Kelley



HAZARDOUS WASTE CONTINGENCY PLAN (PREPARED BY W. A. WOOD, JUNE 28, 1984)

MANSFIELD PRODUCTS COMPANY 246 E. Fourth St. Mansfield, OH 44902 (419) 755-6333

IN-PLANT EMERGENCY TELEPHONE NUMBERS

NAME	TITLE	EXT.	HOME		
W. L. Houck J. P. Clerkin J. Elkins S. E. Cox G. R. Crawford D. E. Downs J. Meadows W. A. Wood Plant Guard	Mgr., Mfg. Services Maintenance Superintendent Maint. Foreman - 2nd Maint. Foreman - 3rd Supvr., Waste Treatment Maint. Foreman - 1st Fire Marshal Supvr., Plant Engineering	486 281 354 354 481 354 351 232	Call Plant Guard, Ext. 333. Plant Guard to contact employees at home when required.		

The above listed personnel are to be notified and are qualified to take action in the event of an emergency incident. They will respond to minimize hazards from fires. explosions, or unplanned release of hazardous wastes.

HAZARDOUS WASTE

Mansfield Products Company generates two types of hazardous wastes;

1. Enamel Floor Sweepings, generated in X-Building and Mill Room. material is the dried or moist enamel dust-like material which is inert, will not burn or explode. It is declared hazardous because the material fails the EP Toxicity Test for normal landfill disposal. The enamel floor sweepings exceed the Barium allowable limit; therefore, are classified as D005, and are to be handled and disposed of as a hazardous waste.

The floor sweepings are to be placed in a 55-gallon drum. When the drum is full, a lid is to be installed on the drum. The approved label is to be placed on the drum, properly filled out and dated ---

> GENERATOR N CLASSI

The drums are to be stored (les

Fire Explosion -

Unplanned Release

Care must be taken to dispose of Floor Sweepings must be placed i spilled, the material must be sw RCRA Inspection Report

all

d drum.

NUED OVER

246 East Fourth Street, Mansfield, Ohio 44902 (419) 755-6011

.....e consumuated Industries Well

2. Trichloroethane, or Trichlorethylene Waste, will be tagged by the department using it before moving to the Salvage Department for temporary storage.

In case of accidental spill, the liquid will be kept out of drains by containing with Quick-Dri, or similar material. Call the Maintenance Foreman to take the necessary action to clean up the spilled liquid. The liquid will not burn or explode.

Drums are to be kept closed. Approved labels will be installed on drum body and top. Weekly inspections will be completed and documented.

MAINTENANCE SUPERINTENDENT - (419) 755-6281 MAINTENANCE FOREMAN - 2ND - (419) 755-6354 MAINTENANCE FOREMAN - 3RD - (419) 755-6354

PLANT GUARD - (419) 755-6333

Coll 2/84 1:00 p

Date and Time of Inspection

RCRA INTERIM STATUS INSPECTION FORM

		· .			•	·	HWFAB #
	PART	1. GENERAL INFORMATIO	N			U.S. EPA I	.D. # OH DX0723601
	Facil	ity: Mansfield Produ	eto Co.	Address: 246	Est Fourth St	·	_ City: Manshell
		: Chio		44902 Count	y: Richland	Telephone:	4/9-755- HSHES
	•			INSPECTION PAR	TICIPANTS(S)		NEW #
)		(Name) - R144 (Noo)		,	Title) Ewc	9/	(Telephone) 9 - 755-6011
	2						
	1	KEUIN CLOUSE		INSPECTOR(S) ENU. SCIENTIST			
	3.						
		•	: :	X INSTALLATIO	N ACTIVITY		•
?	Mark	One	If the si	te is a TSDF, che	ck the boxes indicat	ting which regu	lations are applicable.
		Generator only (G)		General Facility Standards, Preparedness and Prevention, Contingency and Emergency,			Waste Piles SO3
		Transporter (T)		ifests/Records/Re			Land Treatment D81
		TSDF only	Con	Containers SO1			Landfills D80
		G-T	Tan	ks S02/T01			Chemical/Physical/ Biological TO4
		G-TSDF	Sur	face Impoundments	S04/T02	//	Groundwater Monitoring
		T-TSDF G-T-TSDF	Inc	ineration/Thermal	Treatment		Post-Closure
		# 1 TWO	1	_			

		Yes	No	N/A Remark #
•	Has the facility submitted a Part A to Ohio?		******	
2.	If "yes", is it complete and accurate?			<u>//</u>
3.	Has the facility submitted a Part B?			<u>i</u>
	REMARKS, PART 1. GENERAL INFORMATION			
	Include a brief description of site activity and waste hand	ina		

Metal pinshing of washers & Drives words facility in modifial 81

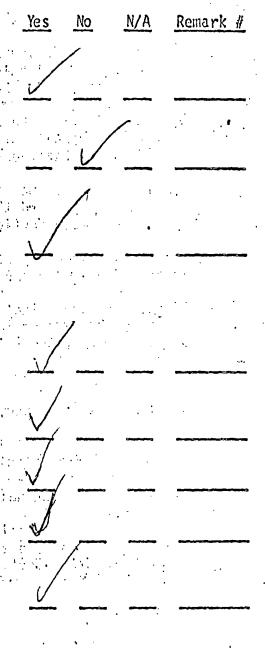
Barning fit, sweeping DOS reduced activity at plants anomal to Rich Roto 2 panels week.

	•		•	<u>Y</u> (No No	N/A	Remark #
5.	The	generator meets the following hazardous waste pre-transport requ	irements:				Doos ninge
	a)	Prior to offering hazardous wastes for transport off-site the was is packaged, labeled and marked in accord with applicable DOT reg (Section 262.30, 262.31 and 262.32(a))		11 -			DOOS WERE NOT MARKED
	b)	Prior to offering hazardous wastes for transport off-site each content of the site each content	ith a	<u> </u>	<u> </u>		CHACK
	c)	The generator meets requirements for properly placarding or offer properly placard the initial transporter of the waste material in pliance with Section 262.33.	ring to n com-	1			
6.		ardous wastes imported from or exported to foreign countries are accordance with the requirements of Section 262.50.	handled			. 12	
7.	tan	the generator elects to store hazardous waste on-site in <u>containents</u> for <u>90 days</u> or less without a RCRA storage permit as provided tion 262.34, the following requirements with respect to such stor	under	t:		•	
•	a)	The containers are clearly marked with the words "Hazardous Wast	e".				:
	b)	The date that accumulation began is clearly marked on each conta	iner.	-	· · :		
8.	Sec and	e generator has provided a Personnel Training Program in complianc ction 265.16(a)(b)(c) including instruction in safe equipment oper d emergency response procedures, training new employees within 6 m d providing an annual training program refresher course (Section 2	ation nonths		1 _		generalization position moving
9.	inc	e generator keeps all of the records required by Section 265.16(d) cluding written job titles, job descriptions and documented employ aining records (Section 262.34).					e-vitag-AVE2000

PART 2	. GENERATOR	I REQUIREMENTS
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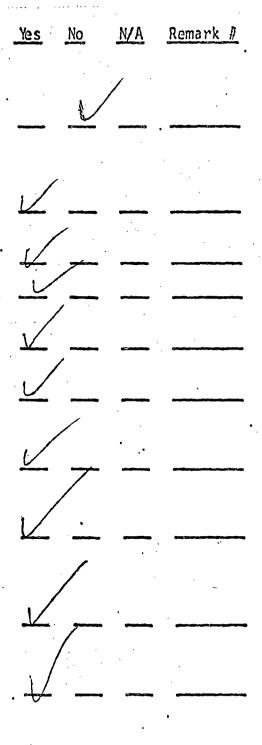
1.	The hazardous waste(s) generated at this	facility have been tested or are	9
	acknowledged to be hazardous waste(s) as	defined in Section 261 and in	
	compliance with the requirements of Sect	ions 262.11.	•

- 2. Does this facility generate any hazardous wastes that are excluded from regulation under Section 261.4 (statutory exclusions) or Section 261.6 (recycle/reuse)?
- 3. Does this facility have waste or waste treatment equipment that is excluded from regulation because of totally enclosed treatment (Section 265.1(c)(9)) or via operation of an elementary neutralization unit and/or wastewater treatment unit (Section 265.1(c)(10)).
- 4. The generator meets the following requirements with respect to the preparation, use and retention of the hazardous waste manifest:
 - a) The manifest form used contains all of the information required by Section 262.21(a) and (b) and the minimum number of copies required by Section 262.22.
 - b) The generator has designated at least one permitted disposal facility and has/will designate an alternate facility or instructions to return waste in compliance with Section 262.20.
 - c) Prepared manifests have been signed by the generator and initial transporter in compliance with Section 262.23.
 - d) The generator has complied with manifest exception reporting requirements (investigate after 35 days, report after 45 days) in Section 262.42(a), (b)
 - e) Signed copies of all hazardous waste manifests and any documentation required for Exception Reports are retained for at least 3 years as required by Section 262.40.



Subpart C: Preparedness and Prevention

- 1. Has there been a fire, explosion or non-planned release of hazardous waste at this facility? (265.31)
- 2. If required due to actual hazards associated with the waste material, the facility has the following equipment: (265.32)
 - a) Internal alarm system.
 - b) Access to telephone, radio or other device for summoning emergency assistance.
 - c) Portable fire control equipment.
 - d) Water at adequate volume and pressure via hoses sprinkler, foamers or sprayers.
- 3. All required safety, fire and communications equipment is tested and maintained as necessary; testing and maintenance are documented. (265.33)
- 4. If required due to the actual hazards associated with the waste material, personnel have immediate access to an emergency communication device during times when hazardous waste is being physically handled. (265.34)
- 5. If required due to the actual hazards associated with the waste material, adequate aisle space to allow unobstructed movement or emergency or spill control equipment is maintained. (265.35)
- 6. If required due to the actual hazards associated with the waste material, the facility has attempted to make appropriate arrangements with local emergency service authorities to familiarize them with the possible hazards and the facility layout. (265.37(a)
- 7. Where state or local emergency service authorities have declined to enter into any proposed special arrangements or agreements the refusal has been documented. (265.37(b)



	RCRA INTERIM STATUS INSPECTION FORM
	all following points need to be
(\mathcal{N})	Subpart D: Contingency and Emergency

5. If an emergency situation has occurred, the emergency coordinator has implemented all or part of the Contingency Plan and has taken all of the actions and made all of the notifications deemed necessary under Sections 265.56.

		Subpart D: Contingency and Emergency	
•	fire	ne facility has a written Contingency Plan designed to minimize hazards from tres, explosions or unplanned releases of hazardous wastes (265.51) and ontains the following components:	
	a)	Actions to be taken by personnel in the event of an emergency incident.	
	b)	Arrangements or agreements with local or state emergency authorities.	
))	Names, addresses and telephone numbers of all persons qualified to act as emergency coordinator.	•
	d)	A list of all emergency equipment including location, physical description and outline of capabilities.	
	e)) If required due to the actual hazards associated with the waste(s) handled, an evacuation plan for facility personnel. (265.51(f))	
2.	has	copy of the Contingency Plan and any plan revisions is maintained on-site and as been submitted to all local and state emergency service authorities that ight be required to participate in the execution of the plan. (265.53)	•
3.		he plan is revised in response to facility, equipment and personnel changes r failure of the plan. (265.54)	
	fam	n emergency coordinator is designated at all times (on-site or on-call) is amiliar with all aspects of site operation and emergency procedures and has he authority to implement all aspects of the Contingency Plan. (265.56)	<u> </u>

N/A Remark #

SUBPARTS INCLUDED

I: Management of Containers

J: Management of Tanks

K: Surface Impoundments

L: Waste Piles

M: Land Treatment

N: Landfills

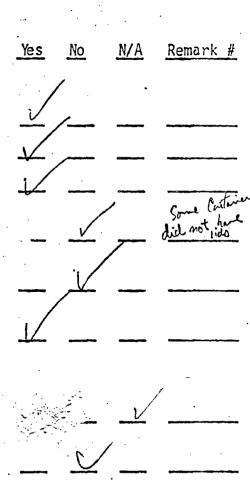
O: Incinerators

P: Thermal Treatment

Q: Chemical/Physical/Biological Treatment

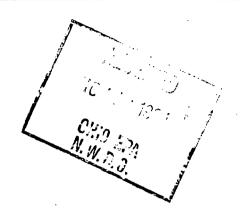
Subpart I: Management of Containers

- · 1. Hazardous wastes are stored in containers which are:
 - a) Closed (265.173)
 - b) In good physical condition (265.171)
 - c) Compatible with the wastes stored in them (265.172)
 - 2. Containers are stored closed except when it is necessary to add or remove wastes. (265.173(a))
 - 3. Hazardous waste containers are not stored, handled or opened in a manner which may rupture the container or cause it to leak. (265.173(b))
 - 4. The area where containers are stored is inspected for evidence of leaks or corrosion at least weekly and such inspections are documented. (265.174)
 - 5. Containers holding Ignitable or Reactive waste(s) are located at least 50 feet (15 meters) from the property line and the general requirements for handling such wastes in Section 265.17 (physical separation, signs and safety) are met (265.176).
 - 6. Containers holding hazardous wastes are never stored near other materials which may interact with the waste in a hazardous manner. (265.177(c)



November 15, 1984

Mr. Ben Chambers, Supervisor Division Solid & Hazardous Waste Management OHIO ENVIRONMENTAL PROTECTION AGENCY Northwest District Office 1035 Devlac Grove Drive Bowling Green, OH 43402



SUBJECT: ENAMEL FLOOR SWEEPINGS (ENAMEL DUST)
CHANGE FROM HAZARDOUS (DOO5) TO NON-HAZARDOUS

Dear Mr. Chambers:

As we discussed in our telephone conversation November 14, 1984, I am sending you the EP toxicity test reports of our enamel floor sweepings (enamel dust). On November 3, 1980, the EP toxicity test results showed Barium at 197 Mg/L, over the allowed limit; therefore, the enamel dust, an unlisted material, was declared hazardous (D005), and the material was disposed of in the Richland County Landfill Hazardous Section.

New EP toxicity tests were performed on October 18, 1984 and November 9, 1984 on the enamel floor sweepings (enamel dust), and the Barium materials were within limit. The other parameters were within limits; therefore, Mansfield Products Company is declaring the material non-hazardous, and would like your permission to dispose of it in the Richland County Landfill. An average of two drums of the material is generated per week.

There is no easy explanation of why the material was hazardous in 1980 and non-hazardous today. The enamel supplies indicate that Barium could vary in some of the base materials in the frit; therefore, as discussed, Mansfield Products Company will test several other future batches of the material to verify that the material continues to be non-hazardous.

If there are any questions or comments, feel free to call.

Very truly yours,

MANSFIELD PRODUCTS COMPANY

W. A. Wood, Supervisor

Plant Engineering

(419) 755-6232

cc: WCI-Cleveland - R. E. Hill

MPC - W. L. Houck

Water Management, Inc.

2480 Broadway Avenue Cleveland, Ohio 44115

Phone: (216) 566-8090

ANALYSIS CERTIFIED BY:	J.	<u> Howard</u>	Sanders
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Director

Date: 11-9-84

Client

Mansfield Products 246 East Fourth Street Mansfield, Ohio 44902

Attn: Bill Wood

P.O. No. 703126

W.O. No. Special - 199

Sample Recd: 11-1-84

Sample No. See Below

Phone: _

Source/Comments

#1 - Finish Coat 10-28-84

Analysis performed in accordance with CFR 40-261 Appendix II for EP toxicity characteristics.

ANALYSIS: Metal results in (ug/1) ppb, all other results in (mg/1) ppm, unless otherwise noted.

•	1 1	2	3	4	٠,		1 1	2	3	4
Acidity - T (CaCO ₃)			-		Mercury	opm	<0.05			
Free (MO) (CaCO ₃)					B4* 1. 1	o Din	1.72		<u> </u>	
Alkalinity - T (CaCO ₃)		-			Potassium					
phth (CaCO ₃)			-		Selenium	opm	<0.02			1
Bact: T. Coli COL/100 ml					Sodium					
Fecal Coli COL/100 ml					Tin					
T Plate COL/100ml					Zino					
Bromide					Nitrogen: Nitrate (N)					1
Boron					Nitrita (N)					
Chloride					Ammonia (N)					i
Chiorine: Res.					Organic (N)				1	
Demand					T Kjeldahi (N)					
Color					Odor					ĺ
Conductivity					Oil & Grease				-	
Cyanide: Total					Oxygen Demand: BOD5					İ
Amenable					COD					
Free					Oxygen Dissolved					
Fluoride					pH					1
Hardness: T (CaCO ₃)					Phenois					
Ca (CaCO ₃)					Phosphorus: Total (P)					
Mg (CaCO ₃)		·			Ortho (P)					
MBAS					Poly (P)	-	1			
Metals: Aluminum					Residue: Total					
Arsenic DOM	<0.01		\		Total Vol					
Cadmium DDM	0.02		-		Suspended			-		
Calcium			-		Voi Suspended				1	
Chromium: Total DOM	<0.01				Settleable					
Hexavalent					Silica					1
Trivalent					Sulfide	•••				
Cobalt -					Sulfite -					1
Copper					Sulfate		1			
Iron					тос					
Lead DDM	0.03				Turbidity (JTU)		1			
Manganese					Barium	opm	3.01			
Magnesium						opm	<0.01			

Sampling N	Method:	By Clier	ıt <u>Y</u>	By V	WMI	Auto	Sampler	Othe	r
------------	---------	----------	-------------	------	-----	------	---------	------	---

Water Management, Inc.

2480 Broadway Avenue Cleveland, Ohio 44115

WY

Sample No. See Below

Phone: (216) 566-8090

ANA	LYSIS CERTIFIED BY:I_ Howard Sanders	Director	Date: <u>11-9-84</u>
	Г	٦	
lient	Mansfield Products	P.O. No. 7031 26	
	246 East Fourth Street	W.O. No. Special -	199
•	Mansfield, Ohio 44902	Sample Recd: 11-1-84	<u> </u>

Phone: _____

Source/Comments

Attn: Bill Wood

#1 - Finish Coat - Almond White 10-28-84
Analysis performed in accordance with CFR 40-261 Appendix II for E.P. Toxicity characteristics

ANALYSIS: Metal results in (ug/1) ppb, all other results in (mg/1) ppm, unless otherwise noted.

	1	2	3	4			1 1	2	3	4
Acidity - T (CaCO ₃)					Mercury	maa	<0.05			
Free (MO) (CaCO3)					Nickel	mag	0.09			
Alkalinity - T (CaCO ₃)					Potassium					
phth (CaCO ₃)					Selenium	maa	<0.02			
Bact: T. Coli COL/100 ml					Sodium					·
Fecal Coli COL/100 ml					Tin					
T Plate COL/100ml					Zinc					T
Bromide		-			Nitrogen: Nitrate (N)					
Boron					Nitrite (N)					
Chloride			1		Ammonia (N)					
Chlorine: Res.					Organic (N)		'			
Demand					T Kjeldahl (N)					
Calor					Odor					
Conductivity			1		Oil & Grease					
Cyanide: Total			1.	ŀ	Oxygen Demand: BOD5					
Amenable			T		COD					1.
Free					Oxygen Dissolved					
Fluoride					рH					
Hardness: T (CaCO ₃)	,				Phenois					
Ca (CaCO3)					Phosphorus: Total (P)					
Mg (CaCO ₃)					Ortho (P)					1
MBAS					Poly (P)					
Metals: Aluminum			1		Residue: Total					
Arsenic DDM	<0.01				Total Vol					
Cadmium ppm	0.01				Suspended	-		_		1
Calcium					Vol Suspended				1	
Chromium: Total DDM	0.02				Settleable					
Hexavalent					Silica					
Trivalent					Sulfide					
Cobalt					Sulfite					
Copper					Sulfate					
Iron					TOC					
Lead DDM	0.05				Turbidity (JTU)					
Manganese					Barium	ppm	0.10			
Magnesium					Silver	mqq	<0.01			

Sampling Method: By Client .	By WMI	Auto Sampler	Other
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Water Management, Inc.

2480 Broac / Avenue Cleveland, Ohio 44115

Phone: (216) 566-8090

ANALYSIS CERTIFIED BY: J. HOWARD SANDERS

__ Director

Date: 10-18-84

Client

MANSFIELD PRODUCTS 246 EAST FOURTH STREET MANSFIELD, OHIO 44902

ATTN: BILL WOOD

P.O. No	70307	4		
W.O. No	Speci	al	199	
Sample Recd:	10-	12-8	4	
Sample No				

Source/Comments

#1-Composite of ground coal enamel, finish coat enamel and iron from nickel filter.

#2-WT Sludge that goes to landfill

Analysis performed in accordance with CFR40-261 Appendix II for E.P. Toxicity Characteristics.

ANALYSIS: Metal results in (ug/1) ppb, all other results in (mg/1) ppm, unless otherwise noted.

	1	2	3	_4			1	2	3	4
Acidity - T (CaCO ₃)					Mercury DDM		<0.05	<0.05	,	
Free (MO) (CaCO ₃)					Nickel PF.YI			1/2	(N	Was)
Alkalinity - T (CaCO ₃)					Potassium					
phth (CaCO ₃)					Selenium	ppm	<0.02	<0.02		
Bact: T. Coli COL/100 ml					Sodium	•				
Fecal Goli COL/100 ml					Tin				,	
T Plate COL/100mi					Zinc					
Bromide					Nitrogen: Nitrate (N)					
Boron					Nitrite (N)			7.0		1
Chloride					Ammonia (N)					
Chlorine: Res.					Organic (N)					
Demand					T Kjeldahl (N)					
Color					Odor					
Conductivity					Oil & Grease					
Cyanide: Total					Oxygen Demand: BOD5					
Amenable					COD					
Free					Oxygen Dissolved					
Fluoride					pH		5.2	8.4		
Hardness: T (CaCO ₃)					Phenois			1		
Ca (CaCO ₃)	T				Phosphorus: Total (P)					1
Mg (CaCO ₃)	<u> </u>				Ortho (P)					
MBAS				 	Poly (P)					1
Metals: Aluminum					Residue: Total					1
Arsenic DDM	<0.01	<0.01			Total Vol					
Cadmium DDM	0.02	0.01			Suspended					
Calcium					Voi Suspended					1
Chromium: Total ppm	<0.01	0.01			Settleable					1
Hexavalent					Silica					
Trivalent				1	Sulfide					1
Cobalt .					Sulfite					1
Copper					Sulfate					1
Iron					TOC					
Lead DDM	0.05	0.08			Turbidity (JTU)					
Manganese	T				Silver	ppm	0.01	<0.01		
Magnesium		}			Barium	ppm	0.06	2.22		

Sampling Method:	By Client	XX	By WMI	Aut	o Sampler	Other
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MANSFIELD PRODUCTS COMPANY

file & H.W. Rubbal to

March 5, 1986

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Ben Chambers, Supervisor
Div. Solid & Hazardous Waste Management
OHIO ENVIRONMENTAL PROTECTION AGENCY
Northwest District Office
1035 Devlac Grove Drive
Bowling Green, OH 43402

SUBJECT: ENAMEL FLOOR SWEEPINGS (ENAMEL DUST)

REF.: YOUR LETTER 5/29/85

Dear Mr. Chambers:

Attached is the EP-Toxicity Test for a composite enamel floor sweepings sample February 19, 1986.

The parameters are within U.S. EPA limits, and the material is non-hazardous.

Very truly yours,

MANSFIELD PRODUCTS COMPANY

W. A. Wood, Supervisor

Plant Engineering

cc: WCI-Cleveland - D. Marques

cc: MPC - F. Ade





2480 Broadway Avenue Phone: (216) 566 - 8090

Cleveland, Ohio 44115

Lab Director

ANALYSIS CERTIFIED BY: J. HOWARD SANDERS

Client

MANSFIELD PRODUCTS 246 EAST FOURTH STREET MANSFIELD, OHIO 44902

ATTN: B. Corbett

Date:	Feb.	19,	1986	
P.O. No	8006	5 7		
W.O. No.	Spec	<u>cial</u>	#199	
Sample F	Recd:	1/3	1/86	
Sample N				
) Dhana:				

Source / Comments

oxdot

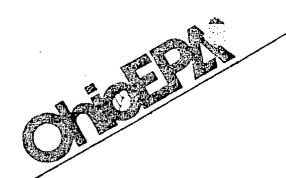
Γ

#1 - Vitreous Enamel Floor Sweepings (Ground & Finish) Analysis performed in accordance with CFR 40-261 Appendix II for E.P. Toxicity Characteristics.

ANALYSIS: Metal results in (ug / 1) ppb, all other results in (mg / 1) ppm, unless otherwise noted.

	1	2	3	4		1	2	3	4
Acidity					Мегсигу ррт	<0.05			
Alkalinity					Nickel ppm	13.5			
Bacteria					Potassium				
T. Coliform / 100ml					Selenium ppm	<0.02			
F. Coliform / 100ml					Silver ppm	<0.01			
F. Strep / 100ml					Sodium				
Total Plate Count					Tin				
Chloride					Zinc				
Chlorine: Res.					Nitrogen: Nitrate (N)				
Color		-			Nitrite (N)				
Conductivity		_			Ammonia (N)				
Cyanide: Total					Organic (N)			_	
Amenable					T Kjeldahl (N)				
Free					Odor				
Fluoride					Oil & Grease				
Hardness					Oxygen Demand: BOD₅			· · · · · · · · · · · · · · · · · · ·	
MBAS					COD				
Metals: Aluminum					рН	8.0			
Arsenic ppm	<0.01				Phenols			1	
Barium ppm	31.7				Phosphorus: Total (P)			1	
Cadmium ppm	0.03				Ortho (P)				
Calcium					Residue: Total				
Chromium: Total ppm	0.01				Total Vol			1	
Hexavalent					Suspended		· ···		
Trivalent					Vol Suspended				
Cobalt					Settleable				
Copper					Sulfate				
Iron					TOC				:
Lead ppm	0.23				Turbidity				
Manganese									
Magnesium						_			
									-
						<u> </u>			
	,							+	

Sampling Method:	Bv Client	XX	Bv WMI	Auto Sampler	Other
Japgou.	_,				



Re: Mansfield Products Company

Richland County Hazardous Waste

Mr. W. A. Wood, Supervisor Plant Engineering Mansfield Products Company 246 East Fourth Street Mansfield, Ohio 44902 May 29, 1985

Dear Mr. Wood:

We have evaluated the material you submitted in November, 1984, on the waste enamel dust (sweepings). I apologize for the slow response to your inquiry and certainly appreciate your cooperative attitude.

The extraction procedure toxicity data would indicate that the floor sweepings from the enemeling operations are non-hazardous. If the material continues to be dry floor sweepings, disposal in a sanitary landfill would be satisfactory.

However, the nickel concentrations do present a concern for this waste and the delisted (8-6-81, FR40158) wastewater treatment sludge. Please note that U.S. EPA is re-evaluating acceptable concentrations of nickel in waste materials and may issue guidance on this soon. We may need to review the status of these wastes at a later date, also.

To assure that we have good data to base any future nickel decision on and to clarify the quality of the floor sweepings, we are requesting that your company perform quarterly sampling and analysis of the sweepings for a period of one year. We do not believe, based on the results shown to date, that the complete EP toxicity parameters need to be evaluated. We would suggest that the composite material be analyzed for nickel, cadmium, barium, lead and chromium. Please submit the results of the analyses by July 1 and October, 1985 and January 1 and April 1, 1986.

Please contact me or Paul Kalter if you have any questions.

Yours truly,

Bennett G. Chambers, P.E.

Division of Solid & Hazardous Waste Mgt.

BGC/1st

cc: G. Jones, Richland County Landfill

cc: P. Cotter, DSHWM cc: A & C



ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415 International Specialists in the Environment

CRL Receipt Date //7/90 FIT	Receipt Date /	/21/9/Review	Completed 2/05/9
TO: L. Lycek.		~	, , , , , , , , , , , , , , , , , , ,
FROM: C. KOUNG.	Hioduct	ر ا	
SUBJECT: //ampfield 7	tumbun		VIB! A
PAN: 0H05335A(1 hour ch	arged for revi	iev) Case	# <i>17960</i>
Sample Description			
Organics (VOA, ABN, Pest/PCB)		Inorganics	(Metals, Cyanide)
#Low Soil		#9_	Low Soil
Low Water			Low Water
Drinking Water			Drinking Water
Other			Other
Project Data Status	Completed!!	\cap	
Incomplete, await	ing Na	Soll)
FIT Data Review Findings:			
	•		
<i>;</i>			
Check Data Sheets for Tran	scription Err	ors	•
Compounds were	detected in s	ample(s); se	e enclosed sheet.
9			9/20/00
Book No Page No		Date Sa	mpled (45/10)
0759:2			



ecology and environment, inc.

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CRL Receipt Da	te //5/90 FIT Receipt Date/	12/9/ Review Completed 13	./9/
TO: Luce	k .		
FROM: C. KOW		•	
SUBJECT: ///QM		11/2/2	
PAN: 0H05325	(1 hour charged for rev	iew) Case # / 4760	
		-	
Sample Descrip	tion		
Organics (VOA,	ABN, Pest/PCB)	Inorganics (Metals, Cyanide	e)
# Lo	w Soil	#Low Soil	
Lo	w Water	Low Water	
Dr	inking Water	Drinking Water	
Ot	her	Other	
Project Data S	tatus Completed!!		
In	complete, awaiting		_
FIT Data Revie	w Findings:		_
-*			
Check Data	Sheets for Transcription Err	rors	
	Compounds were detected in s	sample(s); see enclosed shee	t.
\mathcal{C}	7	glash i	`
Book No/	7 Page No	Date Sampled //35/10	<u>/</u>
0759:2			

recycled paper

•	REGION V
. DATE:	11-16.90
UEJECT:	Review of Region V CLP Described for Review on 17-1990
FROM:	Curtis Ross, Director (5SCRL) Central Regional Laboratory Contral Regional Laboratory
TO :	Data User:
	We have reviewed the data for the following case(s).
•	SITE NAME: Mansfield products (OH) SMO Case No. 1960 No. of D.U./Activity
•	EPA Data Set No. Samples: Numbers
	CRL No.
	SMO Traffic No. MCHA 35-43
	CLP Laboratory: Okumus Hrs. Required for Review: 6
	Following are our findings.
	•
	Su pert pace mp 11/13/90

() Data are acceptable for use.

Data are acceptable for use with qualifications noted above. () Data are preliminary - pending verification by Contractor Laboratory. () Data are unacceptable.

cc: Dr. Alfred Haeberer/Joan Fisk/Gary Ward, EPA Support Services Ross K. Robeson, EMSL-Las Vegas Don Trees, CLP/Sample Management Office

\$,1

CASE:14960 LAB: SKINNER SOILS: MEHA35-43 SITE: MANSFIELD PRODUCTS

Below are the out of control audits for case 14960 which contains 9 low level soil samples analyzed for total metal and total cvanide.

The lab resubmitted form 6 and 10 which were placed into the data package. The reviewer corrected form 5 for control limits.

ICP ANALYSES: The matrix spike of Sb(22.9%), Cr(53.4%), and Cu(54%) are out of control.

The duplicate audit of Cu(35%) and Cr(34.7%) were flagged(*) by the lab however the technical criteria for soils(35\% RPD) was not exceeded for Cr therefore Cr data are not qualified on this basis. The lab did not flag the duplicate audit of Sb(200%) since the technical criteria for soils(+/- 2 X CRDL) was not exceeded therefore all Sb data are not qualified on this basis.

For Sb: MEHA38,39 are unusable(R); the rest of the data are estimated(J) due to a low bias. All Cr data are estimated(J) due to a low bias. All Cu data are estimated(J) due to poor precision and a low bias.

The ICP serial dilution of Zn(17.9%) indicates interference and all Zn data are estimated(J).

The lab did not flag(N) on the matrix spike of Mn(14.5%) since the sample result was 4 $\rm X$ > the spike added therefore all Mn data are acceptable.

The duplicate audit of Mg(45.9%) was flagged(*) by the lab however the technical criteria for soils(-/- 2 X CRDL) was not exceeded therefore all Mg data are acceptable.

The duplicate audit of Ca(84.5%) indicates poor precision and all Ca data are estimated (J).

The prep blank of Na(16.8 mg/kg) and the CCB of Co(5.4 ug/l) indicate contamination. Na(MEHA35) and Co(MEHA36) are estimated(J) due to contamination.

GFAA ANALYSES: The matrix spike of As(74.1%) is out of control. All As data are estimated(J) due to a low bias.

The lab flagged(W) on Tl(MEHA42) indicating interference and the data result is estimated(UJ).

OTHER QUALIFIERS: All CN and Hg data are acceptable.

heviewed by! M. Fletcher

Date: 11/13/90

QC EXCEPTION SUMMARY REPORT

DATA SET LAB Q.C. I 17/3/50 BATE: 17/3/50 SITE Mansheld LAB Spensor	PRODUCTION MATRIX: SOUL SAMPLE SPK. CONC.: JOS WATER SAMPLE DUP. MATRIX: SOIL SAMPLE DUP. SOIL SAMPLE DUP.	
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LUG		ł	'0	VERALI	CASE	QC					MAT	nix spe	CIFIC Q	C		SAN SPECI	nc qc	F	IELD (×	RE	HON	roc	OTH(A/
	i j	20	130	Commo Calvega	No. 44	hep 84 1GA	45	10	104	tel Dup APD	ini ipi iid	40 U-40 400	ad tea tea	8 5	U-m 141	CIAA Dup	UM	-	38	lade MA	24	112	3 § 8	COMMENTS
Auminum												•												
Antonony											23.5													
Arpene		i,									141.													
84444															<u> </u>									
der thus																								
Cadmin														L										
derythum Codmouth Codmouth		•								945														
Cobalt Cobalt Coppe									-	34.7	5.5.4				 									
(obet		li .				37																		<u>'</u>
(math										35	54			_										
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Magnessum																		<u> </u>						
Magagaras																								
Manganete																								<u> </u>
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Muldel						•																		·
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Author																								
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Cyanuty																				1				;

INORGANIC REGION	L DAIA ASSI	SSMENT SUM	U.A.K.I	
ASE NO. 14960	LABORATO	DRY_SK	muer	-
DG NO. MEHA35	DATA USE		11	1.
ow	REVIEW O	OMPLETION I	ATE 11/13	190
O. OF SAMPLES WATER S		_ OTHER		
EVIEWER [] ESD [], ESAT [] OTHER, O	ONTRACT/CC	NTRACTOR _		·····
;	- ICP	A A	Hg	CYANID
1 HOLDING TIMES	0	n n	0	()
2. INITIAL CALIBRATIONS		1		7
3. CONTINUING CALIBRATIONS		+		
	1			
4. FIELD BLANKS ("F" = not applicable)	- 			+
5. LABORATORY BLANKS			-	+
6. 103	$\frac{\mathcal{L}}{\mathcal{L}}$			
7. LCS	44			
8. DUPLICATE ANALYSIS		<u> </u>		+
9. MATRIX SPIKE				
10. MSA	V			\
11. SERIAL DILUTION				\
12 SAMPLE VERIFICATION	70			
13. REGIONAL QC (F = not applicable)	<u> </u>			
14. OVERALL ASSESSMENT	<u> </u>	<u></u>		<u>'y</u>
 O = No problems or minor problems that do X = No more than about 5% of the data point M = More than about 5% of the data points Z = More than about 5% of the data points 	nts are qualified as	d as either estim s estimated.	ated or unusable	
PO ACTION ITEMS:	•		•	
CONTRUCT CONTROL				

• • •				
				
DEAC OF CONCEPTS				
REAS OF CONCERN:	. 	······································		

U.S. EPA - CLP COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-0081 Lab Code: SKINER Case No.: 14960 SAS No.: SDG No.: MEHA35 SOW No.: 7/88 EPA Sample No. Lab Sample I MEHA35 09392-018/ MEHA35D 09392-0152 MEHA35S 09392-0106 MEHA36 09392-028 09392-038 EPA CLA MEHA37 09392-01 536 S. CLA of St. 00000 63505 SSS S. CLANN ST. MAL LAB. MEHA38 MEHA39 MEHA40 09392-068 MEHA41 09392-078 MEHA42 09392-085 MEHA43 09392-095 Were ICP interelement corrections applied? Yes/No YES Were ICP background corrections applied? Yes/No YES If yes-were raw data generated before application of background corrections? Yes/No NO Comments: I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. Name: Richard P. Purdy _ Title: CLP Program Manager Date:

COVER PAGE - IN

Rev. 6/89

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEHA35

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-D081 |__

Lab Code: SKINER Case No.: 14960 SAS No.: SDG No.: MEHA35

Matrix (soil/water): SOIL

Lab Sample ID: 09392-01S

Level (low/med): LOW

Date Received: 89/26/98

% Solids:

79.8

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

	 		
CAS No.	: Analyte		M
7429-90-5	Aluminum	(8410.00)	-
7440-36-0	Antimony	5.60 B N	P
17440-38-2	Arsenic	16.20 N	F
17440-39-3	¦Barium	68.601)	{P }
7440-41-7	Beryllium		IP !
7440-41-7	Cadmium	0.48[U]	P
7440-70-2	Calcium	24400.00 *.\	P
7440-47-3	{Chromium	1 /42.501 1.N*	1P 1
7440-48-4	Cobalt	8.60 B	IP I
7440-50-8	Copper	59.40 N	1P
7439-89-6	Iron	23500.001	IP I
7439-92-1	Lead	45.80 \	P
7439-95-4	Magnesium	6190.00 *	IP I
7439-96-5	Manganese	554.00	IP I
7439-97-6	Mercury	0.11 U	icvi
7440-02-0	Nickel	(28.40)	P
7440-09-7	Potassium		ip !
7782-49-2	Selenium	0.74 U	\F :
7440-22-4	Silver	0.96:01	ip i
7440-23-5	Sodium	775.70 B	(P
7440-28-0	Thallium	0.50 U	IF I
7440-62-2	Vanadium	17.40	IP I
7440-66-6	Zinc	144.00 E	P
	Cyanide	1.30 U	IAS
,	1		1
		· 	- · '

					0000	02
Commer	nts:					
Color	After:	BROWN	Clarity	After:	Artifacts:	
Color	Before:	BROWN	Clarity	Before:	Texture:	FINE

INORGANIC ANALYSIS DATA SHEET

INORGANIC ANALYSIS DATA SHEET

MEHA36

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-D081

Lab Code: SKINER Case No.: 14960 SAS No.: SDG No.: MEHA35

Matrix (soil/water): SOIL Lab Sample ID: D9392-D2S

Level (low/med): LOW Date Received: D9/26/90

% Solids: 85.8

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

 			
CAS No.	 Analyte !		
7429-90-5	Aluminum	(3060.00)	- P
7440-36-0	Antimony	2.50 B N	IP!
17440-38-2	Arsenic	26.10 N	if i
17440-39-3	Barium	/ 24.40 B \	P
7440-41-7	Beryllium		P
7440-41-7	¦Cadmium	0.44 U	IP I
17440-70-2	Calcium	760200.00 *(IP :
17440-47-3	Chromium	1 103.00! N*	P
17440-48-4	Cobalt	5.10¦B	P
17440-50-8	Copper	<u> 79.60 N</u> *	IP :
7439-89-6	:Iron	33200.00	P
7439-92-1	Lead	<i>(</i> 30.50 \	(P
7439-95-4	Magnesium	\ 24800.00) *	P
7439-96-5	¦Manganese	972.00	P
7439-97-6	Mercury	0.10 U	CV
7440-02-0	Nickel	23.10	P
17440-09-7	Potassium	412.00 B:	P
7782-49-2	¦Selenium	0.69 U	\F {
7440-22-4	Silver	, 0.88;U;	P
7440-23-5	Sodium	/ 128.00 B (P
7440-28-0	¦Thallium	, 0.46;0;	F
7440-62-2	¦Vanadium	10.50 B	P
;7440-66-6	Zinc	150.00 E	:P :
1	¦Cyanide	1.20;0;	AS
!	<u> </u>	·	

Color Before: BROWN Clarity Before: Texture: COARSE

Color After: BROWN Clarity After: Artifacts: YES

Comments:

STONES

(100003

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-0081

Lab Code: SKINER Case No.: 14960 SAS No.:

SDG No.: MEHA35

Matrix (soil/water): SOIL

Lab Sample ID: 09392-038

Level (low/med): LOW

Date Received: 09/26/90

% Solids:

83.9

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	¦ ¦ Analyte	 Concentration C Q	M
7429-90-5	Aluminum	(3670.00)	-\ -
7440-36-0	Antimony	3.30 B N)	P
7440-38-2	Arsenic		¦F ¦
17440-39-3	¦Barium	46.001)	{P {
7440-41-7	Beryllium	0.72 B	P
17440-41-7	Cadmium	0.45 U	P
7440-70-2	Calcium	42200.00 *,	P
17440-47-3	Chromium	49.60 N*	P
7440-48-4	Cobalt	6.00 B 	P
7440-50-8	Copper	<u> 414.00 N</u> *	¦P
7439-89-6	Iron	29200.00	P
7439-92-1	Lead		;P ;
¦7439-95-4	¦Magnesium	\ 10700.00 *	P
7439-96-5	Manganese	669.00	¦₽ ¦
17439-97-6	Mercury	D.11 U	CV
17440-02-0	Nickel	23.80]	P
7440-09-7	Potassium) 534.00 B;	IP !
7782-49-2	Selenium	0.67 U	if !
7440-22-4	Silver	0.90 0	P
17440-23-5	Sodium	109.00 B	IP :
17440-28-0	¦Thallium	U.45 U	¦F ¦
17440-62-2	¦Vanadium	7.70 B	IP :
17440-66-6	Zinc	135.00 E	P
!	¦Cyanide	1.20 U	AS
l	· · · · · · · · · · · · · · · · · · ·	!! _ !!	!!

Color Before: BROWN Clarity Before:

Texture: COARSE

Color After: BROWN

Clarity After:

Artifacts: YES

Comments:

STONES	000004
	000004

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEHA38

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-0081

Lab Code: SKINER Case No.: 14960 SAS No.:

SDG No.: MEHA35

Matrix (soil/water): SOIL

Lab Sample ID: 09392-048

Level (low/med): LOW

Date Received: 09/26/90

% Solids: 73.4

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	c¦ a	M
7429-90-5	Aluminum	2840.00	2	- P
7440-36-0	Antimony	2.70	U¦ N	¦ P
7440-38-2	Arsenic	9,70	i N	¦ F
7440-39-3	¦Barium	45.30	B¦ /	¦₽
7440-41-7	Beryllium	0.61	в;	¦ P
7440-41-7	Cadmium	0.53	U	¦P
7440-70-2	Calcium	13800.00	-	;P
7440-47-3	Chromium	,31.30	N	¦ P
7440-48-4	Cobalt	6.00	BI	¦P
7440-50-8	Copper	76.401	! N) *	¦P
7439-89-6	¦Iron	14600.001	لنب	; P
7439-92-1	¦Lead		\:	¦P
7439-95-4	Magnesium	3270.00	\ ¦ ★	۱P
7439-96-5	Manganese	\ 333.00	} ;	¦P
7439-97-6	Mercury	0.14	}	CV
7440-02-0	Nickel	19.601	4	iP
7440-09-7	Potassium	403.001	BI	¦ P
7782-49-2	Selenium	0.82	UT.	¦F
7440-22-4	Silver	/ 1.10	سلل	¦P
7440-23-5	Sodium	[107.00	B!	P
7440-28-0	¦Thallium	, 0.54	\	; F
7440-62-2	Vanadium	1 6.701	B: 1	i P
7440-66-6	Zinc	/ 131.00	! E (ļ p
_	Cyanide	1.40		IAS
	-!	!	1	i

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: BROWN

Clarity After:

Artifacts: YES

Comments:

ROOTS AND LEAVES

U.S. EPA - CLP EPA SAMPLE NO. INORGANIC ANALYSIS DATA SHEET MEHA39 Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-DD81 | Lab Code: SKINER Case No.: 14960 SAS No.: SDG No.: MEHA35 Matrix (soil/water): SOIL Lab Sample ID: 09392-058 Level (low/med): LOW Date Received: 09/26/90 80.6 % Solids: Concentration Units (ug/L or mg/Kg dry weight): MG/KG CAS No. ! Analyte !Concentration!C! !M ! |7429-90-5 | Aluminum | _2540.001)1 1 P 2.40 U N |7440-36-0 |Antimony | {P |7440-38-2 |Arsenic 10.80; N !F 17440-39-3 | Barium 23.40 B ! P |7440-41-7 |Beryllium| 0.66 B 10 17440-41-7 | Cadmium 0.49|U| ! P |7440-70-2 |Calcium 10 23100.00 17440-47-3 | Chromium | 35.90; !P ! P 17440-48-4 | Cobalt 5.00 B 17448-50-8 | Copper ! P 35,70! ! !P : |7439-89-6 |Iron 17000.00¦\¦ \7439-92-1 \Lead 35.10 \ \ \ ! P |7439-95-4 | Magnesium | 5570.00: | !P ! 17439-96-5 | Manganese | 463.001/ !P ! 17439-97-6 | Mercury 0.10|U| !CV! |7440-02-0 |Nickel !P ! (12.50)460.00 B 17440-09-7 | Potassium! ! P ! |7782-49-2 | Selenium | 0.72¦U¦ !F 17440-22-4 | Silver ! P D. 97 | U | 1744D-23-5 | Sodium 92.90 B IP ! !7440-28-0 !Thallium ! 15 0.48:01 17440-62-2 | Vanadium 7.00 B ! P !P !

Color Before: BROWN Clarity Before: Texture: MEDIUM

104.00; ;

1.20 | U |

|AS|

Color After: BROWN Clarity After: Artifacts: YES

|Cyanide

Comments:

STONES **900006**

EPA SAMPLE NO. INORGANIC ANALYSIS DATA SHEET MEHA40 Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-0081 ! Lab Code: SKINER Case No.: 14960 SAS No.: SDG No.: MEHA35 Lab Sample ID: 09392-06S Matrix (soil/water): SOIL Level (low/med): LOW Date Received: 09/26/90 80.4 % Solids: Concentration Units (ug/L or mg/Kg dry weight): MG/KG |CAS No. | Analyte |Concentration|C| ! M ! 17429-90-5 | Aluminum | 4340.00 L ! P |7440-36-0 |Antimony | 17.70¦ ¦ N 1F _39.80; N |7440-38-2 | Arsenic | 17440-39-3 | Barium 1310,00 !P / 1.00 B 17440-41-7 | Beryllium | !P |7440-41-7 |Cadmium | ! P 2.10 |7440-70-2 | Calcium | 16000,00; ¦P |7440-47-3 |Chromium | 322.00 !P |7440-48-4 |Cobalt 124.00 !P ¦ P 17440-50-8 | Copper 180.00 N 33700.00 ¦ P |7439-89-6 |Iron |7439-92-1 |Lead ¦P 522.00¦ !P |7439-95-4 |Magnesium| 3280.001 |7439-96-5 | Manganese | 683.00¦ ¦₽ ! 7439-97-6 | Mercury !CV! 0.38¦ |7440-02-0 |Nickel 1680.001 !P ! !P 1130.00 B |7782-49-2 | Selenium | 0.72 U 1F 1 |7440-22-4 |Silver 1.10 B; ¦P 17440-23-5 | Sodium 695.00 B ! P 17440-28-0 | Thallium | ¦F 0.48;U; |7440-62-2 | Vanadium | 9.60|B| ۱P |7440-66-6 |Zinc 662.00! ! ¦P _____¦Cyanide 7.701 !AS! Color Before: BROWN Clarity Before: Texture: MEDIUM Clarity After: Color After: BROWN Artifacts: YES Comments: STONES U00007

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEHA41

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-0081 |_

Lab Code: SKINER Case No.: 14960 SAS No.: SDG No.: MEHA35

Matrix (soil/water): SOIL

Lab Sample ID: 09392-07S

Level (low/med): LOW

Date Received: 09/26/90

% Solids: 92.7

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	¦ ¦ Analyte ¦		M
7429-90-5	Aluminum	7240.00D	P
7440-36-0	Antimony	7.60 B N	IP I
7440-38-2	Arsenic	18.30 N	F
17440-39-3	Barium	(190.00)	IP I
7440-41-7	Beryllium		IP I
17440-41-7	Cadmium	0.41 U	P
17440-70-2	Calcium	14100.00; ; *	\P \
17440-47-3	Chromium	<u>54.40 N</u> *	P
7440-48-4	Cobalt	18.20)	P
17440-50-8	Copper	212.00 N*	P
7439-89-6	Iron	27100.00	P
7439-92-1	¦Lead	/ 250.00 \	P
7439-95-4	Magnesium		P
17439-96-5	Manganese	561.00	P
17439-97-6	Mercury	0.29	CV
17440-02-0	Nickel	\ 74.00	IP !
7440-09-7	Potassium	\ 1500.00 \/	P
7782-49-2	Selenium	U.62 U	F.
7440-22-4	Silver	0.82\U <u>\</u>	10 ;
17440-23-5	¦Sodium	226.00 B	P
7440-28-0	¦Thallium	0.41 U	{F }
17440-62-2	Vanadium	(15.60)	(P
7440-66-6	Zinc	486.00 E	P
!	_¦Cyanide	1.10 U	AS
 	1	! !!!!!	_!!

Color Before: BROWN

Clarity Before:

Texture: FINE

Color After: BROWN

Clarity After:

Artifacts: YES

Comments:

ROOTS AND STONES

800000

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEHA42

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-0081 |__

Lab Code: SKINER Case No.: 14960 SAS No.: SDG No.: MEHA35

Matrix (soil/water): SOIL

Lab Sample ID: D9392-08S

Level (low/med): LOW

Date Received: D9/26/9D

% Solids:

88.8

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
CAS No.	 Analyte		M
7429-90-5	: Aluminum	9970.00	-
7440-36-0	Antimony	46.20 N	P
7440-38-2	Arsenic	26.40 N	ir i
7440-39-3	Barium	844.00	P :
7440-41-7	Beryllium		P
7440-41-7	Cadmium	0.44 U	P
17440-70-2	Calcium	777900.00 *	P
17440-47-3	Chromium	/679.00! N*	P !
7440-48-4	Cobalt	(81.40)	P
7440-50-8	Copper	125.00 N*	ip i
7439-89-6	Iron	39400.00	P
7439-92-1	Lead	468.00 \	P
17439-95-4	Magnesium	17900.00 *	P
7439-96-5	Manganese	5450.00	iP i
7439-97-6	Mercury	0.10 0	ICVI
7440-02-0	Nickel	206.00	IP I
17440-09-7	Potassium	1380.00	P !
17782-49-2	Selenium	0.64 U	(F)
17440-22-4	Silver	1 1.50 B	P
7440-23-5	Sodium	2040.00	{P
17440-28-0	Thallium	0.43 U W	IF
7440-62-2	¦Vanadium	45.30	P
17440-66-6	Zinc	811.00 E	P
i	¦Cyanide	1.10 U	AS
1		!	_

Color Before: BROWN

Clarity Before:

Texture: MEDIUM

Color After: BROWN

Clarity After:

Artifacts: YES

Comments:

ROOTS AND STONES

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-D081 |__

MEHA43

Lab Code: SKINER Case No.: 14960 SAS No.: SDG No.: MEHA35

Matrix (soil/water): SOIL

Lab Sample ID: 09392-09S

Level (low/med): LOW

Date Received: 09/26/90

% Solids:

78.7

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

1	 			
: CAS No. 	: Analyte 	: Concentration !	 C	M
7429-90-5	Aluminum	6800.00	2	;;
7440-36-0	Antimony	32.90	I N	IP I
7440-38-2	Arsenic	$\frac{1}{2}$ 19.50	I N	F
7440-39-3	Barium	671.00		{P }
7440-41-7	Beryllium	0.80	IB!	IP I
7440-41-7	Cadmium	, 0.50	[U]	P
7440-70-2	Calcium	8110.00	*	}P
7440-47-3	Chromium	38.90	N*	P
7440-48-4	Cobalt	65.20		P
7440-50-8	Copper	229.00	I N	P
7439-89-6	Iron	27300.00	- 	P
7439-92-1	¦Lead	926.00	! } !	¦P
7439-95-4	Magnesium	2870.00	*	P
7439-96-5	Manganese	994.00	{	P
7439-97-6	Mercury	0.28	{	CV
7440-02-0	Nickel	123.00	14	P
7440-09-7	Potassium	1090.00	B	P
7782-49-2	Selenium	, 0.75		\F \
7440-22-4	Silver	1 1.20	B	{P
7440-23-5	¦Sodium	645.00	B \	{P
7440-28-0	¦Thallium	0.50	U	F
7440-62-2	¦Vanadium	15.10) 	[P
7440-66-6	Zinc	1030.00		P
! 1	¦Cyanide	1.30		AS
 		l !	!!	

Color Before: BROWN

Clarity Before:

Texture: MEDIUM

Color After: BROWN

Clarity After:

Artifacts: YES

Comments:

ROOTS AND STONES

BLANKS

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-0081

Lab Code: SKINER Case No.: 14960 SAS No.: SDG No.: MEHA35

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

! !				1 1	!!!
;	Initial			!!	
;	Calib.	Continuin	g Calibratio	n !!	Prepa-
i	Blank	Blank			ration !!
Analyte	(ug/L) C	1 C	2 C	3 C	Blank C M
1 1				11	
Aluminum	29.0 0	29.0 U	29.0 0	29.0 0	5.800 U P
Antimony	10.0¦U¦	-22.7¦B¦	10.0¦U¦	-27.2 B	2.000 U P
Arsenic	3.0¦U¦	3.O¦U¦	3.0 U	3.0¦U¦¦	0.600 U F
Barium	2.0 0	2.0 U	2.0 0	2.0 U	0.400¦U¦¦P ¦
Beryllium	1.0 0	1.0¦U¦	1.0 U	1.0 U	0.200 U P
Cadmium	2.0 U	2.0 U	2.0 U	2.D U	0.400¦U¦¦P ¦
Calcium	54.0¦U¦	54.0:0:	54.O¦U¦	54.0¦U¦¦	10.800¦U¦¦P ¦
Chromium	5.0¦U¦	5.0¦U¦	5.O¦U¦	5.0 0	1.000¦U¦¦P ¦
Cobalt	4.0 0	5.4 B	4.0¦U¦	4.0 0	0.800¦U¦¦P ¦
Copper	5.0¦B¦	5.7¦B¦	5.7¦B¦	-5.O¦B¦¦	0.600¦U¦¦P ¦
Iron	-21.1¦B¦	12.0¦U¦	43.5 B	47.3 B	2.400 U P
!Lead !	16.0¦U¦	16.0¦U¦	16.0¦U¦	16.0¦U¦¦	3.200 U P
Magnesium	37.O¦U¦	37.o¦U¦	37.O¦U¦	37.0¦U¦¦	7.400 U P
Manganese	7.0¦U¦	7.0¦U¦	7.O¦U¦	7.0¦U¦¦	1.400¦U¦¦P ;
Mercury	0.2 U	0.2 U	0.2 U	0.2 U	0.100¦U¦¦CV¦
Nickel	5.0¦U¦	8.9¦B¦	5.0¦U¦	5.0 U	1.000¦U¦¦P ¦
Potassium	780.0¦U¦	780.0¦U¦	780.0¦U¦	780.0¦U¦¦	156.000¦U¦¦P ¦
Selenium	3.0¦U¦	3.0¦U¦	3.O¦U¦	3.0 U	0.600¦U¦¦F ¦
Silver	4.0101	4.0¦U¦	4.0 0	4.0 0 }	0.800 U P
Sodium	37.0¦U¦	37.O¦U¦	37.O¦U¦	37.0¦U¦¦	16.800¦B¦¦P ¦
Thallium	2.0 U	2.0 U	2.0 0	2.0 U	0.400¦U¦¦F ¦
Vanadium	3.D¦U¦	3.0¦U¦	3.O¦U¦	3.0 U	0.600¦U¦¦P ¦
Zinc	16.5¦B¦	3.6 B	3.6¦B¦	2.0 U	0.400 U P
Cyanide	20.0¦U¦	20.0 0	20.0¦U¦	20.0 0	1.000¦U¦¦AS¦
11	_				

3 BLANKS

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-0081

Lab Code: SKINER Case No.: 14960 SAS No.: SDG No.: MEHA35

Preparation Blank Matrix (soil/water):

Preparation Blank Concentration Units (ug/L or mg/kg):

	Initial Calib. Blank (ug/L) C	1	nuing Calibra Blank (ug/L) C 2 C	İ	 Prepa- ration Blank	CIIM	
<u> </u>		·		[1		_¦
Aluminum	;	29.01	·		į t	P	-
Antimony	i	-45.41	•	1 1	1	P	I I
Arsenic	{	3.01		3.0 U	t t	F	1
Barium	;	2.0	·		1	P	1
Beryllium	1	1.0	•		-	P	1
Cadmium	<u> </u>	2.0		1 1	-	P	;
Calcium	}	54.01	•			P	1
Chromium	1	5.0	·		-	! P	ł
Cobalt	1	4.01		1 1		P	I
Copper	!	-5.7	B¦		1	P	
:Iron :	1	12.0	U¦ ;		i		ļ
Lead	{	16.0	U! !		1	P	ł
Magnesium	1	37.0	U¦ !		1	P	ŀ
Manganese	}	7.01	U¦ ¦	1 1	; 	P	ł
Mercury	† 1	0.2	U! 0.2 U	0.2 U	 	1 110	٧ŀ
Nickel	ļ	5.0	U¦ ;	1 1	1	P	1
Potassium	<u> </u>	780.01	U¦ ¦		-	P	1
Selenium	<u> </u>	3.0	U	1 1 1	1	F	I
Silver	! ;	4.01	U¦ ¦	1 1	i i	P	1
Sodium	<u> </u>	37.0	U¦ ¦	1 1	1	P	I
¦Thallium ¦	 	2.01	U¦ ;	1 1	1	F	1
Vanadium	!	; 3.0;	U¦ ¦		1	P	ļ
Zinc	!	-9.2	B: ;		1	P	1
Cyanide	l !	20.01	U 20.0 U	20.0101	t I	1 11AS	3 ¦
1	1	11	_1		1	1_11_	_:

3 BLANKS

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-0081

Lab Code: SKINER Case No.: 14960 SAS No.: SDG No.: MEHA35

Preparation Blank Matrix (soil/water):

Preparation Blank Concentration Units (ug/L or mg/kg):

Analyte	Initial Calib. Blank (ug/L) C	Blank	Calibration (ug/L) 2 C	3 C::	Prepa- ration Blank C M
Aluminum	!				NR
Antimony	!		1 1		NR
Arsenic	3.0¦U	; 3.a;u;	3.O¦U¦	1 1 1	
¦Barium ¦	;		1	1 11	NR
Beryllium	!		1 I 1· (NR
Cadmium	!	!			NR
¦Calcium ¦	1	1 1		•	NR
Chromium	ļ .	; ;			NR
Cobalt	1	; ; ;	1 1		NR
Copper	1	! !			NR
Iron	!	1 1	1 1	1 11	NR
Lead	1	! !!			NR
Magnesium	i t			. !!!	NR
Manganese	}	1 1		1 11	NR
Mercury	1	0.2 U	0.2 U	0.2 U	cv
Nickel	1		1 1	1 1 1	NR
Potassium	t 1	1 !			NR
Selenium	3.0¦U	3.0(0)	3.0¦U¦	3.0¦U¦¦	F
Silver				1 1 1	NR
Sodium	1		. .	1 1 1	NR
¦Thallium ¦			1 1	1 1 1	NR
¦Vanadium ¦	-		1		NR
Zinc	1		1 1	1 11	NR
Cyanide	! !	20.0 U	1 1	1 11	AS
		_ _			

BLANKS

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-D081

Lab Code: SKINER Case No.: 14960 SAS No.: SDG No.: MEHA35

Preparation Blank Matrix (soil/water):

Preparation Blank Concentration Units (ug/L or mg/kg):

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Blank 1 C	Calibration (ug/L) 2 C	3	C	Prepa- ration Blank	C M
{Aluminum		1 1	! !			1 11		NF
Antimony		1 1	1 1	; ;				NF
Arsenic								NE
¦Barium ¦		;	1 1					NF
Beryllium		; ;	; ;	1 1				NF
Cadmium			1 1					NF
Calcium			1 1			1 11		NF
Chromium		1 1	; }	1 1		1		NF
Cobalt		1 1	1 1					NF
Copper		1 1	} }			! ! }		NF
Iron			1 1			1 1 1		NE
Lead			1 1	1 1		1 1 1		NF
Magnesium		1 1	1 1			1 11		NF
Manganese			1 1					NF
Mercury			0.2{U}	1 1		1 11		1 110
Nickel			1 1	. } }				NF
Potassium		1 [1 1					NF
Selenium		1 1						NF
Silver			1 1 .			1 1 1		NF
Sodium				[]		-		- HNF
Thallium								NE
¦Vanadium ¦		1 1	 	[]				NF
Zinc								NF
Cyanide		1 1	1 1			1 11		IIINE

5A SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-0081 ;

MEHA35S

Lab Code: SKINER Case No.: 14960 SAS No.:

SDG No.: MEHA35

Matrix: SOIL

Level (low/med): LOW

% Solids for Sample: 79.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

1	!		1		!	1	-
;	Control	 	<u> </u>		1	1	- }
-	Limit	¦Spiked Sample	¦ Sample	Spike		1	1
Analyte	*R	Result (SSR) C	¦ Result (SR) C	: Added (SA)	%R	1 10	4 ¦
!	IMFLAR	F <u>O</u>	·	. ii	l	_	_
Aluminum	A. C. C. S. S.	1	1	1	1	NF	₹¦
Antimony	75-125	33.8848	5.6463¦B	125.31	22.5	NIP	1
Arsenic	75-125	23.5915	16.1642	10.03	74.1	N¦F	1
¦Barium	75-125	550.1263	68.5777	501.25	96.1	\ P	i t
Beryllium	75-125	12.7920	0.7687 8	12.53	96.0	10	!
¦Cadmium	75-125	11.2757	0.482010	12.53	90.0	¦P	!
Calcium	1	1	;	1	1	NF	₹¦
Chromium	75-125	69.2858	42.5342	50.13	53.4	N¦P	Ţ
Cobalt	75-125	130.9075	8.5526 B	125.31	97.6	¦P	-
Copper	75-125	93.2483	59.4322	62.66	54.0	N¦P	1
¦Iron	1	; · · · · · · · · · · · · · · · · · · ·	!	1	1	! NF	₹¦
Lead	75-125	154.9827	45.7899	125.31	87.1	P	-
Magnesium		1 1	{	1 1	1	! NF	₹¦
¦Manganese	175-135	¦ 572.0561¦	553.9086	125.31	14.5	1 P	- 1
Mercury	75-125	0.6152	0.1139¦U	0.57	107.9	¢\	7 }
(Nickel	75-125	148.8574	28.3859	125.31	96.1	¦Ρ	Į.
Potassium	1		1	1	1	INF	₹¦
Selenium	75-125	2.26691	0.7444 U	2.51	90.3	۱F	-
Silver	75-125	11.8396	l 0.9639¦U	12.53	94.5	{ P	;
¦Sodium	<u> </u>		1		1	! NF	₹¦
Thallium	75-125	11.9161	0.4963 U	12.53	95.1	۱F	F
¦Vanadium	75-125	135.9852	17.3703	125.31	94.7	۱P	Į.
Zinc	75-125	240.4290	144.4452	125.31	76.6	¦ P	1
Cyanide	75-125	6.2419	; 1.2506¦L	6.17	101.2	¦ AS	3¦
{	!	lll	l	_l l		1	1

Commerces.		
		

5B POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-0081 |

Lab Code: SKINER Case No.: 14960 SAS No.:

SDG No.: MEHA35

Matrix: SOIL

Level (low/med): LOW

Concentration Units: ug/L

! !	Control	¦ ¦ ¦Spiked Sample	! ! !	Sample	! ! !	Spike	 - -	!	
Analyte	%R	Result (SSR)	C		c¦		*R	ļQ	M
Aluminum	·				! 				NR
Antimony	† 	117.37		23.43	¦B	120.0	78.3	-	lP !
Arsenic	! !	! !			1 1		(-	1	NR
¦Barium]	1 1	1 1		1 1			1	NR
Beryllium	! !						t !		NR
Cadmium	f 	! !			1 1			!	NR
Calcium	!	1						1	NR
Chromium	! !	522.85		176.50		350.0	99.0	-	IP !
Cobalt			1 1				1		NR
Copper	1	765.08	1 1	246.62	1 1	500.0	103.7	ì	P
Iron			i ;		1 1		i	i	NR
Lead	i .	1	1 1		1 1	!	, ,	į	NR
Magnesium			i i		1 1			i	NR
Manganese	i		; ;				i	i	NR
Mercury		:			i i	ı		i	NR
¦Nickel		1	; ;		; ;			i	NR
Potassium) 		i :		1 1		† †	i	NR
Selenium		1	i i		; ;		; ;	:	NR
Silver	1	<u> </u>	; ;		1 1			!	NR
Sodium	1 1		1 1		1 1	I	1	1	NR
Thallium	i	<u> </u>			1 1		! !	[NR
Vanadium	1							1	NR
Zinc	1				1 1		! !	1	NR
¦Cyanide	! !	!	1 1				t !	1	NR
 	 	·	ا ــ ا ـ	' 	_		! !	_	!

Comments:		
	- 	
	 	

6 DUPLICATES

EPA SAMPLE NO.

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-0081 |_

Lab Code: SKINER Case No.: 14960 SAS No.: SDG No.: MEHA35

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 79.8

% Solids for Duplicate: 80.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

1.1	1.1		
	i i	i i	
	(0)	i i	ii i i
Limit !!	Sample (2) C!!	Duplicate (D) C;	RPD Q M
i	0(17.77041.11		
i i			3.6 P
11			200.0 P
11			14.5 F
48.211		73.2359	6.6 P
11	O.7687¦B¦¦	0.6579¦B¦¦	15.5¦¦ ¦P ¦
! !	0.4820 U	0.4820 U	
11	24354.1462	9886.2507	84.5 * P
1 1	42.5342	29.9547	34.7! * P
11	8.5526¦B¦¦	10.3142 B	18.7¦¦ ¦P ¦
1 1	59.4322	41.7124	35.0 * P
1 1	23511.6557	24477.0496; ;;	4.0 P
† † ! \	45.7899	42.9897¦	6.3 P
1204.9	6193.3659; ;;	3882.5416	45.9 * P
	553.9086	453.2002	20.0 P
1 1	0.1139 U	0.1139¦U¦¦	
9.6	28.3859	29.8173; ;;	4.9¦¦ P
11	1196.9342¦B¦¦	1195.8980 8	0.1 P
1.1	0.7444 U	0.6962 U	F
1 1	0.9639[U];	0.9639 U	P
11	75.6771¦B¦¦	70.9225 B	6.5 P
1.1	0.4963;U;;	0.4641 U	F
12.0;;	17.3703	16.4450	5.5 P
	144.4452		20.4 P
	1.2506 U		AS
	1204.9	Control	Control Sample (S) C Duplicate (D) C

10 Instrument Detection Limits (Quarterly)

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-0081

Lab Code: SKINER Case No.: 14960 SAS No.: SDG No.: MEHA35

ICP ID Number: P1

Date: 07/15/90

Flame AA ID Number:

Furnace AA ID Number:

!			 		
- 1	Wave-	;	ļ .		{
1	length	Back-		IDL	!!
Analyte	(nm)	ground	(ug/L)!	(ug/L)	M
		·	i		
Aluminum	308.20		200		
Antimony	206.80	}	60 }	10.0	ip i
¦Àrsenic			10;		; ;
Barium	493.40		200	2.0	! P !
Beryllium	313.00		5 :		•
Cadmium	226.50	;	5 ;		
Calcium	317.90	,	5000	54.0	{P
Chromium	267.70		10	5.0	; P
Cobalt	228.60		50	4.0	{P
Copper	324.70		25	3.0	¦P
¦Iron	259.90	1	100	12.0	¦P
Lead	220.30] 	3	16.0	¦P
Magnesium	279.00	i L	5000	37.0	¦P ¦
Manganese	257.60	1	15	7.0	¦P
Mercury	! 1	1	0.2		!
Nickel	231.60	!	40	5.0	¦ P
Potassium	766.40	! !	5000	780.0	P
Selenium	\ 	<u>;</u>	5) ;
Silver	328.00	! !	10	4.0	¦P
Sodium	588.90	! !	5000 ;	37.0	}P
¦Thallium] [i t	10		I I
Vanadium	292.40	<u> </u>	50	3.0	LP
Zinc	213.80	l 1	20	2.0	10
1	l	t	l		!

Col	mment	ts:			
	P1:	THERMO	JARRELL-ASH	ICAP61	(#10782)
					
		 			

10 Instrument Detection Limits (Quarterly)

Lab Name: SKINNER & SHERMAN LABS.

Contract: 68-D9-0081

Lab Code: SKINER Case No.: 14960

SAS No.:

SDG No.: MEHA35

ICP ID Number:

Date:

19/15/98

02/15/00

Flame AA ID Number:

Furnace AA ID Number: F1

 Analyte	Wave- length (nm)			(na/r)	M
Aluminum Antimony Arsenic Barium Beryllium Cadmium	197.20	BS	200 60 10 200 5	3.0 20 COX 10129	F
Calcium Chromium Cobalt Copper Iron Lead			5000 10 50 25 100		
Magnesium Manganese Mercury Nickel Potassium		1 1 1 1 1 1 1 1 1 1	5000 15 0.2 40		
Selenium Silver Sodium Thallium Vanadium Zinc	196.00	8\$ 	5 10 5000 10 50	3.0	F

Comme F:		JARRELL-ASH	VIDEO	22E	(#2486)		

στ

Instrument Detection Limits (Quarterly)

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-0081

Lab Code: SKINER Case No.: 14960 SAS No.: SDG No.: MEHA35

ICP ID Number: 10/15/90

Flame AA ID Number:

Furnace AA ID Number: F3

,	- ,		,			 ,
1	;	'	כם	i 		outz
1	ŧ		20			whipeney
1	-1	2.0	101	58	8,90%	Thallium
1	_;		2000		,	muibos
;	i		τοι	}		SIJAGL
}	;		9			wnjuatas:
1	1		2000	;		muissetod!
ł	į		לם			Nīckej
1	;	•	12.0			Mercury
1	¦		TE	:	• •	Wanganese
1	ļ		2000		}	muieenem
-	;		ξ	!		reaq
-	¦		1001	l	}	ILLou
ŀ	;		52	:		Copper
1	;	,	109	! !	}	Copsft
1	ł		lot	; !	}	Chromium
}	;		2000	i i	}	Calcium
}	i		: S	!) 	Cadmium
l	i		9	;		Beryllium
1	ŀ		200	<u> </u>) }	muinsa;
;	i		וסז	•		Arsenic
!	- 1		109	}	1	Antimony
1	:		200	¦		munimulA
-	_ :	<u> </u>	1	1	i ————	
	1 ;	(7/ 5 n)	(7/6n)	ground	' '	Analyte
-	ľ	IDC	כצסר	Back-	rength	1
!			1	! !	-9VEW	1
<u></u>		<u> </u>	<u> </u>	! !	·	<u> </u>

F3: THERMO JARRELL-ASH VIDEO 22E (#2913)

10 Instrument Detection Limits (Quarterly)

Lab Name: SKINNER & SHERMAN LABS. Contract: 68-D9-0081

Lab Code: SKINER Case No.: 14960

SAS No.: SDG No.: MEHA35

ICP ID Number:

Date: 07/15/90

10/15/90

Flame AA ID Number: M2

Furnace AA ID Number:

	Wave-		CRDL :	IDL	1
Analyte		ground	(ug/L)	(ug/L)	M
Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc	253.60		200 60 10 200 5 5 5 5 5 5 6 6 6 6	0.2	CV
1		!			

Con	men	ts:							
	M2:	SPECTRO	PRODUCTS	HG-4	(#4707)				
						 · · · · · · · · · · · · · · · · · · ·			
						 			
						 		<u>-</u> -	

CORRECTED NARRATIVE -PJC1/14/91

page 1 of 9

1.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

	, REGION V	
. DATE:	12/24/90	
SUEJECT:	Review of Region V CLP Data Received for Review on November 5, 1990	
FROM:	Curtis Ross, Director (55CRL) Patrick Churles for Central Regional Laboratory	
TO:	Data User: FIT	
	We have reviewed the data for the following case(s).	
	SITE NAME: MANSFIELD PRODUCTS (OH) SMO Case No. 14960 No. of D.U./Astivity	
·	EPA Data Set No. Samples: 9 Numbers /	
	SMC Traffic No. EHQ 42 -50	
	CLP Laboratory: ENCOTEC for Review: 15 +2 = 17.	
Sang A la EHQY A la Ever	Estimine are our fincines. e laboratory received nine (9) soil samples for vor, svor and pesticide / PCB alysis on 9-26-90. These samples were received in good condition. mple EHQ47 is the displicate of EHQ43. When Wifeon ple EHQ50 is the displicate of EHQ49. 1/11/91 ruge. number of Tics were present in the SVOR fraction (all samples): 12(14), EHQ45(20), EHQ47(20), EHQ48(20), EHQ49(17), EHQ50(20). ruge number of SVOR calibration authors was noted. y pesticide sample except EHQ42 needed to be diluted. les EHQ43,44,45,46 contained Aroclor 1242 ples EHQ47 and 48 contained Aroclor 1260. EHQ48 also reported Heptoclor Epoxid am 1219-90	· e·
	The reviewers narrative is noted in the following pages () Data are acceptable for use. () Data are acceptable for use with qualifications noted above. () Data are preliminary - pending verification by Contractor Laboratory. ESAT (With 12) 12/160	ned N
-	co: Dr. Alfred Haeberer/Joan Fisk/Gary Ward, EPA Support Services Ross K. Robeson, EMSL-Las Vegas Don Trees, CLP/Sample Management Office	

PCB

Narrative

1.) Holding Time

Water and soil was sampled on the 25th of September, 1990. The laboratory received nine (9) soil samples on the 26th of September, 1990, in good condition.

All VOA soil samples exceeded VOA soil holding times of seven (7) days by three (3) days.

Positive results for these samples are flagged as estimated (J) and any non-detects are flagged with the quantitation limits as estimated (UJ).

All SVOA soil samples met the proper holding time criteria.

All Pesticide soil samples met the proper holding time criteria.

2a.) GC/MS Tuning

GC/MS tunings complied with the mass list and ion abundance criteria for both BFB and DFTPP.

2b.) GC Instrument Performance

Retention times (RT's) for DDT were greater than (>) 12 minutes using packed columns. This meets acceptable GC packed column criteria.

Some Pesticide standards had to be repeated due to unacceptable retention time shifts. Upon reanalysis, the standards met proper retention time shift criteria.

Chlordane was not included in the pesticide/PCB analytical sequence.

3.) Calibration

The initial and continuing calibrations of the VOA and SVOA fraction were evaluated for the target compound list (TCL) and any outliers were recorded on the outlier forms included with this narrative.

A linearity check of the pesticide standards based on the calibration factor (CF) of evaluation mix A, B and C was performed. It was acceptable.

4.) Method Blanks

VBlk1 is the low level VOA soil blank.

VBlk1 reported Trichloroethene, Toluene and no VOA TICs.

Toluene and Trichloroethene are laboratory contaminants. The presence of these compounds in any of the associated samples is flagged as non-detect (U) when the sample results are less than (<) 5x the blank result. The VOA blank summary (Form 4) lists the associated samples.

SBlk1 and SBlk2 are low level SVOA soil blanks.

SBlk1 and SBlk2 did not report any TCL compounds or SVOA TIC's.

PBlkL1 and PBlkL2 are the low level pesticide soil blanks. There were no TCL compounds reported.

5.) Surrogate Recoveries

All soil VOA surrogate recoveries were acceptable.

All soil SVOA surrogate recoveries were acceptable.

Soil pesticide surrogate dibutylchlorendate was out of control in samples EHQ47 (250%), EHG47DL (211%), EHQ48 (231%), EHQ48DL (229%), EHQ49 (517%), and EHQ49MS (151%). Any positive pesticide results in these samples are flagged as estimated (J) and any non-detect is flagged with the quantitation limit as estimated (UJ).

All other pesticide surrogate recoveries were acceptable.

6.) Matrix Spike and Matrix Spike Duplicate (MS/MSD)

Sample EHQ45 was used as the low level soil matrix spike for VOA, SVOA and Pesticide samples.

Soil VOA spike 1,1-Dichloroethene (RPD29%) is out of control. Therefore, any positive result for this compound is flagged as estimated (J) and any non-detect is flagged with the quantitation limit estimated (UJ) in the unspiked sample (EHQ45).

Soil SVOA spike 4-Nitrophenol (MSD117%) is out of control. Therefore, any positive result for this compound is flagged as estimated (J) and any non-detect is flagged with the quantitation limit estimated (UJ) in the unspiked sample (EHQ45).

All soil Pesticide spikes met proper QC criteria.

7.) Field Blanks and Duplicates

There were no field blanks associated with this dataset.

There were no sample duplicate associated with this data set.

W Ira Wilson Sample EHQ47 is the soil duplicate of EHQ43.

Disregard information reported below.

Sample EHQ43 reported no VOA TCLs and 1 WOA TIC; SVOAs

Phenanthrene (990), Anthracene (190), Fluoranthene (1300),

Pytene (790), Benzo(a) Anthracene (490), Bis(2
ethylhexyl) Phthalate (230), Chrysene (480), Benzo(b)

Fluoranthene (900), Benzo(a) Pyrene (510), Indeno(1,2,3
cd) Pyrene (420), Benzo(g,h,i) Perylene (530) and nine

(9) SVOA TICs; and Aroclor 1242 (3400).

Sample ENQ47 reported no VOA TCLs or VOA TICs; SVOAs Naphthalene (1800), 2-Methylnaphthalene (3300), Dibenzofuran (620), Phenanthrene (1300), Di-n-Butylphthalate (100), Fluoranthene (900), Pyrene (380), Benzo(a)Anthracene (430), Chrysene (420), Benzo(b)Fluoranthene (900), Benzo(a)Pyrene (500), Indeno(1,2,3-cd)Pyrene (290), Benzo(g,h,i)Perylene (440) and twenty (20) SVOA TICs; and Aroclor 1260 (455).

Sample EHQ50 is the soil duplicate of sample EHQ49.

Sample EHQ49 reported no VOA TCL's and no VOA TICs; SVOAs Naphthalene (170), 2-Methylnaphthalene (270), Phenanthrene (165), Fluoranthrene (190), Pyrene (110), Benzo(a)Anthracene (80), Bis(2-Ethylhexyl)phthalate (75), Chrysene (125), Benzo(b)Fluoranthene (185), Benzo(a)Pyrene (100), Indeno(1,2,3-cd)Pyrene (105), Benzo(g,h,i)Perylene (125) and seventeen (17) SVOA TICs; no pesticide residues.

Sample EHQ50 reported Methylene chloride (1) and no VOA TICs; SVOAs Naphthalene (130), 2-Methylnaphthalene (160), Acenaphthalene (13), Acenaphthene (64), Dibenzofuran (60), Fluorene (59), Phenanthrene (730), Anthracene (170), Fluoranthene (1600), Pyrene (1100), Benzo(a)Anthracene (840), Chrysene (500), Benzo(b)Fluoranthene (860), Benzo(k)Fluoranthene (460), Benzo(a)Pyrene (420), Indeno(1,2,3-cd)Pyrene (340), Dibenz(a,h)Anthracene (1140), Benzo(g,h,i)Perylene (440) and twenty (20) SVOA TICs; Pesticide 4,4'-DNE (71).

8.) Internal Standards

All soil VOA internal standards were acceptable.

All soil SVOA internal standards were acceptable.

9.) Compound Identification

The identification of SVOA TIC compound Benzo(j)Fluoranthene in SVOA samples EHQ42, 48 and 50 is not correct. The mass spectral data given is not unique enough to assign a definite match. The compound should be reported as an unknown.

10.) Compound Quantitation and Reported Detection Limits

All reported quantitations and detection limits for VOA, SVOA and pesticide/PCB samples are acceptable.

11.) System Performance

GC/MS baseline was acceptable.

GC baseline was acceptable.

12.) Additional Case Specific Problems and/or Information

There were a large number of SVOA sample TIC's in SVOA soil samples EHQ42 (14), EHQ45 (20), EHQ47 (20), EHQ48 (20), EHQ49 (17) and EHQ50 (20).

Sample EHQ43, 44, 45, and 46 reported Aroclor 1242.

Sample EHQ47 reported Aroclor 1260.

Sample EHQ48 reported Aroclor 1260 and Pesticide Heptachlor Epoxide.

Sample EHQ50 reported Pesticide 4,4'-DDE.

Fluoranthene exceeded the Calibration range in comple EHQ48 (500A).

Austranthene was diluted out in EHQ48BL. Therefore, results for this Compound should be estimated.

13.) Overall Assessment

13.) Overall Assessment

The laboratory exceeded holding times on all samples in the VOA fraction by three (3) days.

What Wife There were no complet duplicates; disregard information below.

There were some problems concerning agreement between soil—duplicates in the SVOA, Pesticide and PCB fractions.—

Sample EHQ49 reported no Pesticide residues while the ___

-duplicate-sample-EHQ50-reported-4,4'-DDE.

This reviewer found no additional case problems.

Reviewed By

Weston/ESAT

Date 12/21/90

312-353-2960

CALIBRATION DUTLIERS VOLATILE HSL COMPOUNDS

CASE/SAS # 14960 VULATTLE MSL CUMPTIONIS CONTRACTOR ENCOTEC

Instrument • 004		t. Ca		Con	Cont. Cal.		Con	Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:		05-9								RF ISD TO						
	RF	TRSD	1.	RF	ZD.	<u> • </u>	RF	180	ļ <u> </u>	RF	120	1.	RF	20	*	
Chloromethane		<u> </u>	1		<u> </u>			<u> </u>	<u> </u>		 	1_	<u>l</u>	<u> </u>	1	
Bromomethane	1	1	1	<u> </u>]			<u> </u>		L		_	<u> </u>		\coprod	
Vinyl Chloride]]	<u> </u>	<u> </u>	1					
Chloroethane	1															
Methylene Chloride	1]	Γ]]]]	<u> </u>		<u> </u>	1	}			
Acetone	1.677	50.4	1]			\prod	
Carbon Disulfide													L			
1,1-Dichloroethane]]]					
1,1-Dichloroethene]	1 -]			
Trans-1,2-Dichloroethene		\mathbf{I}														
Chloroform ·													}		\Box	
2-Butanone	-163	33.6	工													
1,2-Dichloroethane	1															
1,1,1-Trichloroethane	1	1						1							Γ	
Carbon Tetrachloride	1	1														
Vinyl Acetate	1	1	1													
Bromodichloromethane	1	1	1													
1.2-Dichloropropane	1	1						1							\top	
Trans-1,3-Dichloropropene	1		1													
Trichloroethene	1	1	1												<u> </u>	
Dibromochloromethane	1	f	1											<u> </u>	_	
1,1,2-Trichloroethane	1	1	1												\vdash	
Benzene	1	1	-	-										-	1	
cis-1,3-Dichloropropene	1	 	1										<u> </u>			
2-Chloroethylvinylether	1	1						-							 	
Bromoform	 														 	
4-Methyl-2-Pentanone	 	i	1											i	 	
2-Hexanone	368	34.8	J					-							_	
Tetrachloroethene	12,00	37.0	3							~					<u> </u>	
1,1,2,2-Tetrachloroethane															-	
Toluene	 -														 	
Chlorobenzene	 														-	
Ethylbenzene															 -	
Styrene	 															
m-Xylene															-	
o/p-xylene	 		\vdash											-		
U/p-xyrene	770	1	Щ				لـــــــــــــــــــــــــــــــــــــ									
	EHRY															
AFFECTED	EHQY															
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11111013/0018: [NU 19/19/90		EHA48														
·	EHOY									 ,					 ¦	
	EHQS														¦	
	EHQ!		 		 -							1			'	
(419/90	CHAY	2-41EV	لے۔:										•			

^{*} These flags should be applied to the analytes on the sample data sheets.

CALIBRATION OUTLIERS SEMIVOLATILE HSL COMPOUNDS

(Page 1)
CONTRACTOR ENCOTES CASE/SAS # 14960

Instrument # 004	IIni	t. Ca	١.	Con	t. C	al.	Con	t. C	al.	Con	t. C	al.	Con	t. C	al.
DATE/TIME:		22-90			190								 		
	ŔF	TARSD	*	RF	120	*	RF	TZD	*	RF	12D	*	RF	1%D	*
Phenol	1	1	1	1	1	1			1		1	1	1	1	十
bis(-2-Chloroethyl)Ether	1	-	1	1		T^-		1	T						1
2-Chlorophenol	1	1	1	1		1			1		1				\top
1,3-Dichlorobenzene	1	1	1	1	1	1	 	1	1			1			\top
1,4-Dichlorobenzene	1	1		1	1	1									\top
Benzyl Alcohol	1511	26.5	5	,248	51.5	15	0155	69.7	5				1	1	1
1,2-Dichlorobenzene	1	13	1	\dagger	1			1						1	\top
2-Methylphenol	1	 				1			1					1	\top
bis(2-chloroisopropyl)Ether	1	†	1	1		1		1						1	\top
4-Methylphenol	1	1			\top	1		1	1						1
N-Nitroso-Di-n-Propylamine	1	1	1		1	1	 							1	
Hexachloroethane	1	 		1		1		 				1	· · · ·	 	_
Nitrobenzene	.70.8			.468	33.9	7	387	45.3	5				 	1	1
Isophorone	.933	 	-	1-100	1	Ĭ,		25.3			 	1		_	
2-Nitrophenol	1.150	 	-	 	t		'```	 			1	 		 	+
2,4-Dimethylphenol	+	 	<u> </u>	-	 			<u> </u>	1		1-	1		 	
Benzoic Acid	162	35.2	7	727	Up I	5							-	┼	\vdash
bis(2-Chloroethoxy)Methane	1102	133.0	3	1,00	70.1	~	 	-	1			-	 	┼	
2,4-Dichlorophenol	} -			 	 		 				 	 		┼	┼─
1,2,4-Trichlorobenzene	-							 	-		-	 	-	 	┼
Naphthalene	 			 		-			 		 			 	
4-Chloroaniline	.082			Nel	25.6	5			-			-		 	
Hexachlorobutadiene	1.082			.001	25.0	7			-			-		 	-
4-Chloro-3-Methylphenol	}													├	┼
2-Methylnaphthalene	╂			-								-		┼	┼
Hexachlorocyclopentadiene	 										}			┼	╁
2,4,6-Trichlorophenol				}											}
2,4,5-Trichlorophenol	1													 	├
2-Chloronaphthalene											 			 	├
2-Nitroaniline	622			ļ			7-	-1 0			 -			 -	├
Dimethyl Phthalate	-532			ļ			ع336	36.8	2			-			
	}													 -	├
Acenaphthylene												-		 	
3-Nitroaniline															
Acenaphthene															├
2,4-Dinitrophenol	1														├
4-Nitrophenol	1116			.045	34.9	7									
Dibenzofuran					ليببا									لـــــا	<u> </u>
	EHQ			I	LK2			148 E							
45550750	EHQ				<u> Q50</u>		EHQ	50 C	<u> </u>						
AFFECTED	EHQ			E#											
SAMPLES:	EHQ					_4									
•	EHO														
Reviewer Initials/Date: MM 12/19/90	Elta														
Initials/Date: MM 12/19/90	EHO								1						
	EHQ	<u> 17</u>													!
	<u> </u>								_4						
•	I					1									

^{*} These flags should be applied to the analytes on the sample data sheets.

CALIBRATION OUTLIERS SEMIVOLATILE HSL COMPOUNDS

Page 2

CASE/SAS # 14960 CONTRACTOR ENCOTES

Instrument # 004		t. Ca								Con	t. C	al.	Con	t. C	a l
DATE/TIME:	10-	22-9		10/23/	90 6	5:06	10/23/9	10 1	140						
	RF	%RSD	*	RF	% D	*	RF	% D	*	RF	%D	*	RF	7.D	*
2,4-Dinitrotoluene		_]									o
2,6-Dinitrotoluene]]							\prod
Diethylphtnalate	7	$\prod_{i=1}^{n}$				I_{-}									\prod
4-Chlorophenyl-phenylether	7]									Γ
Fluorene	7]]							Π
4-Nitroaniline	1,145			.258	77.9	5	194	33.8	J						Γ
4,6-Dinitro-2-Methylphenol]]			Γ			Т
N-Nitrosodiphenylamine															Γ
4-Bromophenyl-phenylether						1					1				Τ
Hexachlorobenzene	7	1										1			Τ
Pentachlorophenol	1	1		1				1	_						Τ
Phenanthrene		1	_	1	1							1		1	T
Anthracene	1				1	1								1	Τ
Di-n-Butylphthalate	1			1											T
Fluoranthene	1					\vdash									T
Pyrene	2.337			1.675	26.3	J	1.457	36.4	亍						Τ
Butylbenzylphthalate	1.169			,876	25.1	5	,62/	46.9	5					<u> </u>	Τ
Senzo(a)Anthracene	1.85			1.221	34.0	_	1.162	37.2	丁						T
bis(2-Ethylhexyl)Phthalate	1.694							48.9							Π
Chrysene	1							-							Γ
Di-n-Octvl Pnthalate	1														Γ
Benzo(b)Fluoranthene	1														Г
Benzo(k)Fluoranthene	1														一
Benzo(a)Pyrene	1														
Indeno(1,2,3-cd)Pyrene	1														
Dibenz(a,h)Anthracene	1								•						_
Benzo(a,h,i) Perylene	1														Γ
3,3'- Dichlorobenzidine	354	 		.206	41.8	7	739	32.5	TI						_

SEE PAGE 1 FOR AFFECTED SAMPLES.

•	These	flags	should	be	applied	to	the	analytes	on	the	sample (data	sheets.
		F	Reviewer	-'s	Initials	s/Da	ate:	[m	2/19	1/90			

8/87

DATA REPORTING QUALIFIERS

For reporting results to EPA, the following result qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

VALUE - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(330 \text{ U})}{D} \times \text{df}$$
 where D = $\frac{100 - \text{ moisture}}{100}$

and df = dilution factor

at 24% moisture,
$$D = \frac{100-24}{100} - 0.76$$

$$\frac{(330 \text{ U})}{.76} \times 10 = 4300 \text{ U}$$
 rounded to the appropriate number of significant figures

For soil sample subjected to GPC clean-up procedures, the CRQL is also multiplied by 2. to account for the fact that only half of the extract is recovered.

- J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a l:l response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration is 3 ug/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for both dilution and percent moisture as discussed for the U flag, so that if a sample with 24% moisture and a 1 to 10 dilution factor has a calculated concentration of 300 ug/L and a sample quantitation limit of 430 ug/kg, report the concentration as 300J on Form I.
- C This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides >10 ng/ul in the final extract shall be confirmed by GC/MS.

DATA REPORTING QUALIFIERS - PAGE

- contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound. This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank
- This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration then the results of both analyses shall I. The Form I for the diluted sample the sample number be reported on separate Forms I. The shall have the "DL" suffix appended to range in the second analysis,
- This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that form I are flagged with the "D" flag.

Ω

- Inis flag indicates that IIC is a suspected aldol-condensation product. . 4
- the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the Case Marrative. If more than one is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some sample. to properly define be required and footnotes may

DATA REPORTING QUALIFIERS

For reporting results to EPA, the following result qualifiers are used. Additional flags or footnotes explaining results are encouraged. Mowever, the definition of each flag must be explicit.

VALUE - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(330 \text{ U})}{D} \times \text{df}$$
 where $D = \frac{100 - \text{ moisture}}{100}$

and df = dilution factor

at 24% moisture, D =
$$\frac{100-24}{100}$$
 - 0.76

 $\frac{(330 \text{ U})}{.76}$ x 10 = 4300 U rounded to the appropriate number of significant figures

For soil sample subjected to GPC clean-up procedures, the CRQL is also multiplied by 2. to account for the fact that only half of the extract is recovered.

- J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a lil response is assumed. Or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration is 3 ug/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for both dilution and percent moisture as discussed for the U flag, so that if a sample with 24% moisture and a 1 to 10 dilution factor has a calculated concentration of 300 ug/L and a sample quantitation limit of 430 ug/kg, report the concentration as 300J on Form I.
- C This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides >10 mg/ul in the final extract shall be confirmed by GC/MS.

DATA REPORTING QUALIFIERS - P

as well as for a positively identiis found in the associated blank idicates possible/probable blank iser to take appropriate action. This flag is used when the analyte is found as well as in the sample. It indicates contamination and warns the data user to This flag must be used for a TIC as well as fied TCL compound.

44

- then the results of both analyses shall I. The Form I for the diluted sample This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.

 This flag will not apply to pesticides/PCBs analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration. range in the second analysis, then the results of both and reported on separate Forms I. The Form I for the dishall have the "DL" suffix appended to the sample number. .
- Inis flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that form I are flagged with the "D" flag.
- Inis flag indicates that IIC is a suspected aldol-condensation product • •
- 600 Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the Case Marrative. If more than one is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some sample.

≎EPA	Cont	raci Latoral PO		ogram 8 A	Sa lexand	mple N	lion Agency Management Office 22313	Org	ganic Traffic (For CLP Use	Report	Case Number 14960	SAS No. (if applica
1. Type of Activity (C	☐ RA ☐ RD ☐ RIFS [ram AROD	SIST STPA	STSI Other	Specify	3. SI EA	eqion I V ipler (N ED hip To: SCOT IV. 2	Number Sampling Co.	Airbill Numb 9/57 Triple volum spike/duplication Ship medium	per 647284 re required for matrix alle aqueous sample. m and high concentra	1. Surface 2. Ground 3. Leachat 4. Rinsate 5. Soil/Sec 6. Oil (SAS 7. Waste (Sas) 8. Other (Sas)	cription (Enter in Water Water e diment S) SAS) (Specify)	
CLP Sample	(A) Sample Descrip-	(B) Concen- tration		HAS A			(D) Special	(E) Station	(F) Date/Time of	(G) Corresponding CLP Inorganic		
Number (From labels)	tion (From bax 5)	L=low M≈rned H=high	VOA	BNA	Pest/ PCB	ARO/ TOX	Handling	Location	Sample Collection	Sample Number		
EHQ 42	_5	<u>L</u>	N	X	X		<u></u>	SI	9-25-90 1630	MEHA 35		
EHQ 43	5	L_	N	$ \chi $	X			52_	9-25-90 1238		_	
EHO 44	5	L	N	$ \chi $	X			s 3	9-25-90 1400	MEHA 37	_	
EHQ 45	5	L	Ŋ	X	X			54	9-25-90 1445			
EHQ 46	5	L	N	λ	X			<i>\$5</i>	9-25-90 1520			
EHQ 47	5	L	N	x	X			56	9-25-901230	l 2.		
EHQ 48	-5	L	A)	X	X			5 7	9-25-90 1300	L Company]	
EHQ 49	5	L	N	X	X			\$2	1-25-90 1330	1 4-	1	
EHQ 50	5	L	N	X	X			59		MEHA 43		
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CRY, State 1. Type of Activity (C DENF D NPLD DER DOAM DESI PA Non-Superfund Programme MANSFIELD CRY, State MANSFIELD	heck one) RA RD RIFS RIFS RA PROD	STPA	tory Pr Box 81 03-557 STSI Other	ogram 8 A -2490	Sailexand FTS 2. Re 3. Sh EN	mple M ria. VA 557-2 egion I Pler (N ED SC 07 IV. C	Number Sampling Co. F) T Iamne) KARECKI T DEVORE OUTROL TECH RESERACHPAK	4. Oate Ship 4. Oate Ship 4. Oate Ship 4. Oate Ship Akbill Numt 91.5.7 Triple volum spikeAtuptio Ship medium samples in	per 647284 ne required for matrix site aqueous sample.	5. Sample Des 1. Surface 2. Ground 3. Leacha 4. Rinsate 5. Soil/Se 6. Oil (SA: 7. Waste (8. Other (: Water te diment S)	,
CLP Sumple Number (From labels)	(A) Sample Description (From bay 5)	(B) Concentration L=low M=med H=high	 	RAS A		ARO/ TOX	(D) Special Handling	(E) Station Location	Date/Time of Sample Collection	(G) Corresponding CLP Inorganic Sample Number		က
EHQ 42 EHQ 43 EHQ 45 EHQ 46 EHQ 47 EHQ 48 EHQ 99 EHQ 50	5 5 5 5 5 5 5 5		2 2 2 3 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4	<i>x x x x x x x x x x</i>	XXXXXXXXX			51 52 53 54 55 56 57 58 59	1-25-90 630 9-25-90 1230 9-25-90 1400 9-25-90 1445 9-25-90 1520 1-25-90 1330 1-25-90 1330 1-25-90 1330	ПЕНА 36 МЕНА 37 МЕНА 38 ПЕНА 39 МЕНА 40 ЛЕНА 41 ЛЕНА 41		
							SHIPME	NT 1	5 Cox	19LETE		

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The Knem 911/1-2 (11-88) Replaces EPA Form 2075-7, which may be used.

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SEPA		7	tory Pr Box 81 03-557	ogram 8 A	Sa lexand FTS	mple N Iria, VA 5 557-2	Manage 22313 490	ement Office			rganic Traffic (For CLP Use O	Report	Case Number	SAS No.			
Sample Description		Coluinn A)	٠.		2. M	egion I		ar Sampling	-,	4. Date Sn			, ,	Jank .	12-	L	v.A1
. Surface Wate . Ground Wate		4	gli		San	pler (N	Jame)			Airbill Nun		L'aboratory Cor	of 90 Appropriate Number	Unit Price	112		سنا
. Leachate	;1	10	1 4					167 6	٠,	ľ		,		\$ 79	<i>7LX</i>	2	
. Rinsate	_	\$ }	, Ka	``		hip To:			. :		me required for matrix	6. Transfer to		Date Receiv	ved		
i. Soil/Sedimen i. Oil (SAS)	Ιτ	ξ.		. 4		<u>.</u>	7 D	T WORE			cate aqueous sample.						
. Waste (SAS)		. 😘	4		121	IŲ.		The C To		Ship medi	um and high concentration	Received by					
. Other (SAS)						· * :	⊃ in i	各种人	81 14	samples in	paint cans.	Contract Numb		Price			
F VOA SAMPLE F COLUMN, C WITH	Y OR N.	INDICAT	: IN			<i>₩;</i> ;;	r 1 (\$. 6 , 14]	4/ (X	See revers	e for additional instruction		Jei 	PIICE			
CLP	(A) . Sample	(B) Concen-	J - , .	RAS A	C) nalvsis	;		(D)	:	(E)	(F)	(G)	(+)	(I) F	ligh C hase	Conc. es
Sample	Descrip- tion -	tration	 		<u> </u>		1 . }	Special	.	Station	Date/Time of	Corresponding CLP Inorganic	San	I		Wa-	Nor
Number (From labels)	(From box 1)	L≟low M≇med H=high	VOA	BNA	Pest/ PCB	ARO/ TOX	<i></i>	Hamdling		Location	Sample Collection	Sample Number	: Cond on Re		Solid	ter— MIS Liq.	ter-
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NARRATIVE

Case 14960

A total of nine (9) samples were received by ENCOTEC on September 26, 1990 and were scheduled for Organics Analysis under Contract #68-D9-0033, first bid lot. Please refer to the following table for vital information that pertains to this case.

Table 1.0

SDG #: EHQ42

		SAMPLE AI	NALYZED - , ;	-1.0.0 00cos
				Total
	Actual	QC	Re-Run	Billable
	<u>Samples</u>	<u>Samples</u>	<u>Samples</u>	<u>Analyses</u>
Volatile Analyses	9	2	0	11
Semivolatile Analyses	9	2	0	11
Pesticide/PCB Analyses	9	2	0	11

Total Cumulate Billable Full Analyses: 11

This Deliverables Package is assembled in accordance with instructions in Section B, 2/88 revision of the Contract Laboratory Program - Statement of Work. A copy of this deliverable has been distributed to Region V, the Sample Management Office (SMO) and EMSL-LV. In addition a sample Summary Data Package and Diskette Deliverable has been sent to SMO.

The following is a detailed description of quality control sample, shipment and/or analytical problems that were encountered in the processing of these samples.

Sample Control/Sample Custody

Samples from this case were received by Federal Express courier on September 26, 1990. All samples were received in good condition with sample tags and method custody information. However, samples EHQ46 and EHQ48 were received in metals in ten bottles instead of the regular BNA/extractable bottle. A phone call was made. We also received a very light Organic traffic report. The region was contacted and sent a more legible copy of the original. Samples were scheduled for analysis.

Extraction/Sample Preparation

Soil samples EHQ42-50 were extracted for pesticide/pcb and semivolatile parameters on 09/27/90. All samples were screened on GC (EC and FID detectors) and were determined low level. The matrix spike and spike duplicate were extracted on 10/04/90. All samples were then processed according to CLP protocol. The final extracts were given for analysis to the GC and GC/MS groups on 10/10/90.

Volatile Analyses

The volatile analysis was performed without any major difficulties. The samples were analyzed on the tenth day of receipt of Case #14960.

The method blank was found to contain Trichloroethene (CAS #79-01-6) and Toluene (CAS #108-88-3). The Trichloroethene contamination is currently under investigation. The Toluene contamination has been found to be connected to our current construction that has just been completed. Both these compounds were found to be less than contract required detection limits (CRQL).

In general, the samples were found to have no hazardous substance list (HSL) compounds positive hits, except SMO sample EHQ45 which was found to have Acetone (CAS #67-64-1) below CRQL;

EHQ47 and EHQ50 were found to contain Methylene Chloride (CAS #75-09-2) with both samples having Methylene Chloride below CRQL. Sample EHQ48 was found to contain Methylene Chloride, Ethylbenzene (CAS #100-41-4) and Total Xylene (CAS #1330-20-7). The Methylene Chloride and Ethylbenzene were found to be below CRQL, while the Total Xylenes were found to be above CRQL.

The QA/QC was excellent. No surrogate percent recoveries were outside of contract required limits, as were no EICPs. The matrix spike and matrix spike duplicate had no percent recoveries and only two relative percent differences outside of contract advisory limits.

Semivolatile Analysis

Semivolatile analysis proceeded without much difficulty. Method blanks were nearly contaminant free. Overall QA/QA was excellent.

Method blank analysis were relatively clean. Only a few Tentatively Identified Compounds were found to be present in the blanks. No Target Compounds were detected. Please see Semivolatile Raw QC Data package for a complete run-down.

Sample analysis revealed positive hits for both Target and Tentatively Identified Compounds. Two of these samples (EHQ48 and EHQ50) required analysis at an secondary dilution. Both of of these samples had positive hits for Fluoranthene (CAS# 206-44-0) that exceeded their linear quantitation range during their initial analysis. The rest of the compounds were at relatively low concentrations. The Semivolatile Sample Data package contains all the particulars.

QA\QC was excellent in general. All contract required criteria including surrogate recoveries, EICP Standard Area's, Standard Retention Times, Tune Criteria, SPCC's & CCC's

and holding times were met. All other criteria were within contract suggested limits. Please see Semivolatile QC Summary Data package for complete details.

Calculations of the water semivolatile samples appeared to differ by a factor of two in the audit. this arose from the fact that the final volume of extract was split in half and combined to produce 1 ml at analysis. During analysis, the laboratory injected 2 ul of the sample to achieve proper CRQL's. The original split was performed to save sample for a possible reanalysis since our current autosampler requires large volumes of sample extract during operation.

Pesticide/PCB Analysis

The pesticide portion of case 14960, SDG# EHQ42 was completed with little difficulty. The QA/QC for these low level soils was good with 6 out of 19 surrogate recoveries outside QC limits. Note the 6 surrogates outside limits were most likely due to the interferences caused by the of high levels PCB's in these samples. The remaining QA/QC was excellent with 0 out of 12 MS/MSD's outside QC limits and 0 out of 6 RPD's outside limits. All blanks were determined to be free of HSL pesticides/PCBs above CRQL.

Some special notes should be mentioned concerning SDG# EHQ42. The ZZZZZ's on form 8E indicate samples, standards and hexane blanks run which were labeled as bad. Some further notes regarding forms 8E: The variation in analysis time between #26 (RT1633) and #27 (RT1847) was due to the high levels of PCB's in sample EHQ49 run at #26. The instrument was placed in bakeout before continuing with a hexane blank at # 27. An auto sampler malfunction occurred at #30. The problem was corrected and the run continued at #35. encountered meeting further problems were compliance requirements with the close-out standards. The INDA run at #47 (RT1148) was reshot until compliance was met at #49 (RT1425). The

INDB required several reshoots in addition to the original injection at #51 (RT1626) in order to meet compliance at #57 (RT2159).

The following special flags are used by ENCOTEC in the pesticide/PCB analysis.

- X-flag: The X flag denotes manually entered data. This always occurs on multi-component quantitations and sometimes occurs on individual pesticides when the analyst had to correct the integration of a peak.
- Z-flag: The Z flag indicates a poor agreement between values obtained on a quantitation using both columns. When the quantitation on both columns gives a ratio from 0.7 to 1.4, a confirmation is assumed. If the ratio ranges above 1.4 but below 1.7 or below 0.7 but above 0.5, then there is some degree of uncertainty as to the validity of the confirmation. A Z flag is then added to indicate the suspect data. Ratios above 1.7 or below 0.5 are considered false postivies and are not reported. GC/MS confirmation is performed on all quantitations if the concentration is If GC/MS confirms a compound, great enough. it is reported without regard to the ratio.
- J-flag: The J flag is used to indicate the presence of HSL pesticides and/or PCBs below the CRDL. In order to use this flag, the ratio MUST be between 0.7 and 1.4 A J flag is not given to any compound quantitatied lower than five times below the CRQL.
- Y-flag: The Y flag is used to indicate that quantitation was performed on the secondary dilution of a sample.

Sample Summary

The following samples within SDG EHQ42 were determined to be free of all HSL pesticides/PCBs above CRQLs: EHQ42, and EHQ49.

The following samples were determined to contain these analytes:

EHQ43 was found to contain Aroclor 1242 (CAS# 53469-21-9), at levels above CRQL's.

EHQ44 was analyzed straight and at a 1:3 dilution with both runs confirmed positive for Aroclor 1242 (CAS# 53469-21-9) at levels above CRQL's.

EHQ45 was analyzed straight and at a 1:2 dilution with both runs confirmed positive for Aroclor 1242 (CAS# 53469-21-9) at levels above CRQL's.

EHQ46 was analyzed straight and at a 1:2 dilution with both injections confirmed positive for Aroclor 1242 (CAS# 53469-21-9) at levels above CRQL's.

EHQ47 was analyzed straight and at a 1:2 dilution with both injections confirmed positive for Aroclor 1260 (CAS# 11096-82-5) at levels above CRQL's.

EHQ48 was analyzed straight and at a 1:4 dilution with both injections confirmed positive for Heptachlor epoxide (CAS#1024-57-3), and Aroclor 1260 (CAS# 11096-82-5) at levels above CRQL's.

EHQ50 was found to contain 4,4'-DDE (CAS# 72-55-9) at levels less than CRQL's; it was therefore flagged with a J.

NOTE:

There was some difficulty in determining the levels of Aroclor 1260 in samples EHQ47 and EHQ48 due to the presence of interfering contaminants which respond to on EC detector. Sample EHQ50 also contained interfering levels of contaminants which respond to an EC detector. It was therefore analyzed at a 1:2 dilution.

Any technical questions regarding the data present in this deliverable should be addressed to the individual whose name appears at the end of this case narrative.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions implied or detailed above. Release of the information contained in this hardcopy data package and in the computer - readable data submitted on floppy diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature:

C Muchael O'Quino (en) 10/30/90

C. Michael O'Quinn

Assistant Laboratory Manager

CLP Project Manager

CMO/crn

75100

2B SOIL VOLATILE SURROGATE RECOVERY

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960

SAS No.:

SDG No.: EHQ42

Level: (low/med) LOW

	EPA	1	S1	S2	S3	OTHER	TOT
	SAMPLE NO.	i	(TOL)#	(BFB)#	(DCE)#	•	OUT
		= 1	======	=====	=====	=====	===
01	EHQ 4 2		110	103	J 98	1	0 1
02	EHQ 43	1	103	106	95	1	0 1
03	EHQ44	1	103	101	92	1	0
04	EHQ45	١	115	86	91	}	101
05	EHQ46	1	102	103	92	1	0 1
06	EHQ47	ı	113	92	91	I	0
07	EHQ 48	1	114	94	95	I	101
80	EHQ 49	1	109	90	91	1	101
09	EHQ50	i	116	97	93	ì	1 0 1
10	EHQ45MS	- (109	106	88	1	101
11	EHQ45MSD		105	99	96	1	101
12	VBLK1	- 1	101	108	91	1	0 1
	l	_		l	1	l	11

QC LIMITS

- S1 (TOL) = Toluene-d8 (81-117) S2 (BFB) = Bromofluorobenzene (74-121) S3 (DCE) = 1,2-Dichloroethane-d4 (70-121)
- # Column to be used to flag recovery values
- * Values outside of contract required QC limits
- D Surrogates diluted out

2D SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Level: (low/med) LOW

EPA	S1	S2	S 3	S4	S5	S6	OTHER I	TOT
SAMPLE NO.	(NBZ)#	(FBP)#	(TPH)#	(PHL) *	(2FP)#	(TBP)#	1 10	OUT
=========	======	=====	**====	=====	=====	======	===== :	===
01 EHQ42	66	71	62	64	63	78	1 1	0
02 EHQ43	75	78	68	77	76	77	1	0
03 EHQ44	71	77	68	1 70	68	82	1	0
04 EHQ45	70	76	66	73	73	88	1	0
05 EHQ46	71	78	72	73	74	90	1 1	0
06 EHQ 47	80	84	65	77	79	92	1	0 1
07 EHQ 48	71	76	62	65	71	79	1 1	0
08 EHQ48DL	73	69	79	49	76	106	1	0
09 EHQ49	64	72	60	61	70	76	1 1	0
10 EHQ50	68	72	81	58	65	76	i i	0 1
11 EHQ50DL	69	68	79	45	69	105	1	0
12 EHQ49MS	80	87	85	77	82	89	i I	0
13 EHQ49MSD	84	86	90	81	82	88	1	0
14 SBLK1	65	72	75	60	60	49	l Í	0 1
15 SBLK2	84	62	93	53	66	42	1	0
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S1 (NBZ) = Nitrobenzene-d5 (23-120)
S2 (FBP) = 2-Fluorobiphenyl (30-115)
S3 (TPH) = Terphenyl (18-137)
S4 (PHL) = Phenol-d5 (24-113)
S5 (2FP) = 2-Fluorophenol (25-121)
S6 (TBP) = 2,4,6-Tribromophenol (19-122)
```

[#] Column to be used to flag recovery values

^{*} Values outside of contract required QC limits

D Surrogates diluted out

2F SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Level:(low/med) LOW___

EPA		5	TOF5
			THER
: SAMPLE NO.	(DBC)	#;	•
	:====	= ; =	=====
01 PBLKL1	86	1	0 8
02)PBLKL2	91	1	0 1
03!EHQ42	101	-	0 8
04 EHQ43	113	ł	0
05:EHQ44	116	1	0 1
06 EHQ44DL	119	;	0
07 EHQ45	127	1	0 1
08 : EHQ45DL	125	1	0
091EHQ46	145	1	0 1
10:EHQ46DL	135	- }	0
11:EHQ47	250	* ¦	0 8
12¦EHQ47DL	211	*	0
13 EHQ48	1 231	× ¦	0 1
14;EHQ48DL	229	* ¦	0
15:EHQ49	517	* ¦	0
16:EHQ49DL	130	1	0
17:EHQ50	136	ţ	0 1
18:EHQ49MS	151	*	0 1
19 EHQ49MSD	116	ł	0
	i	_	

ADVISORY QC LIMITS (20-150)

S1 (DBC) = Dibutlychlorendate

- # Column to be used to flag recovery values
- * Values outside of contract required QC limits
 - D Surrogates diluted out

3B SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ENCOTEC - AA

Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.:

SDG No.: EHQ42

Matrix Spike - EPA Sample No.: EHQ45

Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS 1 % REC	QC LIMITS # REC.
1,1-Dichloroethene	======== 72.5	1 0	67.0	====: 92	===== 59-172
Trichloroethene	72.5	i 0	60.3	83	62-137
Benzene	72.5	I 0	61.5	85	66-142
Toluene	72.5	1 0	76.2	105	59-139
Chlorobenzene	72.5	j 0	66.5	92	60-133

	SPIKE ADDED	MSD CONCENTRATION	MSD %		QC LIMITS
COMPOUND	(ug/Kg)	(ug/Kg)	REC #	RPD #	RPD REC.
=====================================	=======	=============	=====	=====	===== =====
1,1-Dichloroethene	72.5	50.0	69	29 *	22 59-172
Trichloroethene	72.5	52.2	7 2	14	24 62-137
Benzene	72.5	51.5	71	18	21 66-142
Toluene	72.5	66.4	92	13	21 59-139
Chlorobenzene	72.5	56.4	78	16	21 60-133
I		l[l		

[#] Column to be used to flag recovery and RPD values with an asterisk

1 out of 5 outside limits

0 out of 10 outside limits Spike Recovery:

^{*} Values outside of QC limits

3D SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ENCOTEC - AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix Spike - EPA Sample No.: EHQ49 Level: (low/med) LOW

	SPIKE	SAMPLE	l MS	MS	I QC
·	ADDED	CONCENTRATION	CONCENTRATION	1 %	LIMITS
COMPOUND	(ug/Kg)	(ug/Kg)	(ug/Kg)	REC	# REC.
======================================	========	========	=======================================	====	=======
Phenol	14500	0	7760	54	26- 90
2-Chlorophenol	14500	0.	10500	72	125-102
1, 4-Dichlor obenzene	7250	1 0	3370	46	28 104
N-Nitroso-di-n-prop.(1)	7250	0	5590	77	41 126
1, 2, 4-Trichlorobenzene_	7250	1 0	5210	72	138 107
4-Chloro-3-methylphenol	14500	1 0	9860	68	26 103
Acenapht hene	7250	1 0	4030	56	31-137
4-Nitrophenoli	14500	0	15600	108	111-114
2, 4-Dinitrotoluene	7250	1 0	3890	54	128- 89
Pentachlor ophenol	14500	l 0	8050	56	17-109
Pyrene	7250	223	5460	72	35-142
		l	t	i	I

	SPIKE	MSD	MSD	$\overline{}$			
1	ADDED	CONCENTRATION	} %	- 1	%	QC L	IMITS
COMPOUND	(ug/Kg)	(ug/Kg)	REC	#	RPD #	RPD	REC.
======================================	=======		====	:=	=====	=====	=====
Phenol	14500	7690	53	- 1	2	35	26- 90
2-Chlorophenol	14500	10700	74	- 1	-3	50	25-102
1,4-Dichlorobenzene	7250	3440	47	- 1	-2	27	28 104
N-Nitroso-di-n-prop.(1)	7250	5660	78	1	-1	38	41 126
1,2,4-Trichlorobenzene_	7250	5370	74	- 1	-3	23	38 107
4-Chloro-3-methylphenol	14500	9790	68	- 1	0	33	26 103
Acenaphthene	7250	4030	56	1	0	19	31-137
4-Nitrophenol	14500	16900	117	*	-8	50	11-114
2,4-Dinitrotoluene	7250	4190	58	- 1	-7	47	28- 89
Pentachlorophenol	14500	8050	56	1	0	47	117-109
Pyrene	7250	5450	72	ĺ	0	36	35-142
		<u> </u>	1	i		l	li

(1) N-Nitroso-di-n-propylamine

RPD: 0 out of 11 outside limits

Spike Recovery: 1 out of 22 outside limits

[#] Column to be used to flag recovery and RPD values with an asterisk

^{*} Values outside of QC limits

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix Spike - EPA Sample No.: EHQ49 Level:(low/med) LOW

==================================				,,
Heptachlor	0 0 0 0 0	65.2 155 168	97 102 112 106 115	

1	SPIKE ADDED (ug/Kg)	• •	REC #!		QC LIMITS : RPD : REC. :
gamma-BHC (Lindane) Heptachlor Aldrin Dieldrin Endrin 4,4'-DDT	58.5 58.5 58.5 146 146	59.7 l 62.0 l	102 106 118 121 121 123	-5 -4 -5 -13 -5 -4	50 46-127 31 35-130 43 34-132 38 31-134 45 42-139 50 23-134

[#] Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: <u>0</u> out of <u>6</u> outside limits
Spike Recovery: <u>0</u> out of <u>12</u> outside limits

4A VOLATILE METHOD BLANK SUMMARY

Lab Name: ENCOTEC - AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Lab File ID: VSB1005F Lab Sample ID: VSB1005F

Date Analyzed: 10/05/90 Time Analyzed: 1224

Matrix: (soil/water) SOIL Level: (low/med) LOW

Instrument ID: 006

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

			-
EPA	LAB	LAB	TIME
SAMPLE	NO. SAMPLE ID	FILE ID	ANALYZED
=======	==== ===========		=======
01 EHQ42	EHQ42V	EHQ42V	1304
02 EHQ43	EHQ43V	EHQ43V	1344
03 EHQ44	EHQ44V	EHQ44V	1427
04 EHQ45	EHQ45V	EHQ45V	1506
05 EHQ46	EHQ46V	EHQ46V	1545 !
06 EHQ47	EHQ47V	EHQ47V	1624
07 EHQ48	EHQ48V	EHQ48V	1703
08 EHQ49	EHQ49V	EHQ49V	1742
09 EHQ50	EHQ50V	EHQ50V	1821
10 EHQ45MS	EHQ45VM	EHQ45VM	1901
11 EHQ45MSD	EHQ45VD	EHQ45VD	1940
			l1

COMMENTS:

1/87 Rev.

4B SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: ENCOTEC - AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Lab File ID: LSB0927C Lab Sample ID: LSB0927C

Date Extracted: 09/27/90 Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/22/90 Time Analyzed: 2038

Matrix: (soil/water) SOIL Level: (low/med) LOW

Instrument ID: 004

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA	LAB	LAB	DATE
SAMPLE NO.	SAMPLE ID	FILE ID	ANALYZED
=========	= ============	======================================	======
01 EHQ 42	EHQ42B	EHQ42B	10/22/90
02 EHQ43	EHQ43B	EHQ43B	10/22/90
03 EHQ 44	EHQ44B	EHQ44B	10/22/90
04 EHQ45	EHQ45B	EHQ45B	10/22/90
05 EHQ 46	EHQ46B	EHQ46B	10/23/90
06 EHQ 47	EHQ47B	EHQ47B	10/23/90
07 EHQ48	EHQ48B	EHQ48B	10/23/90
08 EHQ 48DL	EHQ48BDL	EHQ48BDL	10/23/90
09 EHQ 49	EHQ49B	EHQ49B	10/23/90
10 EHQ50	EHQ50B	EHQ50B	10/23/90
11 EHQ50DL	EHQ50BDL	EHQ50BDL	10/23/90
i	_1	l	l1

4B SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: ENCOTEC - AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Lab File ID: LSB1004D Lab Sample ID: LSB1004D

Date Extracted: 10/04/90 Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/23/90 Time Analyzed: 0552

Matrix: (soil/water) SOIL Level: (low/med) LOW

Instrument ID: 004

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA	LAB	LAB	DATE
SAMPLE NO.	SAMPLE ID	FILE ID	ANALYZED
=========	=======================================	======================================	=======
01 EHQ49MS	EHQ49BMS	EHQ49BMS	10/23/90
02 EHQ49MSD	EHQ49BMSD	EHQ49BMSD	10/23/90
1		Ī	11

4C PESTICIDE METHOD BLANK SUMMARY

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: ____ SDG No.: EHQ42

Lab Sample ID: MB092790-3 Lab File ID:

Matrix:(soil/water) SOIL Level:(low/med) LOW

Date Extracted: 09/27/90 Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed (1): 10/24/90 Date Analyzed (2): 10/24/90

Time Analyzed (1): 0522 Time Analyzed (2): 0522

GC Column ID (1): RTX-35 GC Column ID (2): DB-5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

: EPA		LAB		DATE		DATE	,	
			·					
: SAMPLE I	NO. 1	SAMPLE	10	ANALYZED	1 ; 6	NALYZE	D 2	i .
=======	====	========	=====	========	=		=== ;	i
01:EHQ42	1	60224	1	10/24/90	1	10/24/	90	١.
02:EHQ43	- 1	60225	1	10/24/90	1	10/24/	90 :	į
03:EHQ44	;	60226	1	10/24/90	1	10/24/	90 1	1
04 EHQ44DL	+	602263	1	10/24/90	1	10/24/	90 1	ļ
05 EHQ45	}	60227	;	10/24/90	1	10/24/	90 1	1
06 EHQ45DL	;	602272	;	10/24/90	1	10/24/	90 1	ŀ
07 EHQ46	+	60228	;	10/24/90	;	10/24/	90 8	}
08 EHQ46DL	1	602282	;	10/25/90	;	10/25/	90 1	ĺ
09 EHQ47	ł	60229	:	10/24/90	1	10/24/	90 !	!
10:EHQ47DL	;	602292	}	10/25/90	1	10/25/	90 1	}
11 EHQ48	1	60230	:	10/24/90	1	10/24/	90 8	l
12:EHQ48DL	ŀ	602304	1	10/25/90	+	10/25/	90 8	}
13¦EHQ49	+	60231	:	10/24/90	1	10/24/	90	į
14 EHQ49DL	:	602312	1	10/25/90	1	10/25/	90 ;	ļ
15:EHQ50	1	602322	:	10/25/90	1	10/25/	90	ļ
!	;				_			1

4C PESTICIDE METHOD BLANK SUMMARY

Lab Name: ENCOTEC-AA Contract: 68-D9-0033 Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42 Lab Sample ID: MB100490-1 Lab File ID: LOW Matrix:(soil/water) SCIL Level:(low/med) Date Extracted: 10/04/90 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed (1): 10/24/90 Date Analyzed (2): 10/24/90 Time Analyzed (1): 0614 Time Analyzed (2): 0614 Instrument ID (1): <u>3600-1D</u> Instrument ID (2): 3600-1E GC Column ID (1): RTX-35 GC Column ID (2): DB-5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	_		DATE ANALYZED 2
01 EHQ49MS		10/25/90	10/25/90 10/25/90
·		1	

VBLK1

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: VSB1005F

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VSB1005F

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 10/05/90

Column: (pack/eap) CAP Dilution Factor: 1

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG 74-87-3-----Chloromethane____ l U 10 74-83-9-----Bromomethane 10 ľŪ 75-01-4-----Vinyl Chloride 10 I U j 75-00-3-----Chloroethane 10 l U | 75-09-2----Methylene Chloride___ 5 I U | 67-64-1-----Acetone_ 10 U | 75-15-0-----Carbon Disulfide 1 U | 75-35-4-----1,1-Dichloroethene_ 5 IU | 75-35-3-----1, 1-Dichlor oethane_ I U 540-59-0----(Total)-1, 2-Dichloroethene__ 5 I U | 67-66-3-----Chloroform I U 107-06-2----1, 2-Dichlor oet hane___ 5 l U | 78-93-3----2-Butanone_ 10 l U | 71-55-6----1, 1, 1-Trichloroethane__ 5 1 U 56-23-5----Carbon Tetrachloride 5 ľ 108-05-4-----Vinyl Acetate 10 1 U 1 75-27-4-----Bromodichloromethane 5 l U | 78-87-5----1, 2-Dichloropropane 5 U 10061-01-5----cis-1, 3-Dichloropropene 5 l U 79-01-6----Trichloroethene 1 IJ 124-48-1-----Dibromochloromethane I U | 79-00-5-----1, 1, 2-Trichloroethane__ 5 I U | 71-43-2----Benzene 5 ΙU 10061-02-6----trans-1,3-Dichloropropene 5 IU 175-25-2----Bromoform 5 IU | 108-10-1-----4-Methyl-2-Pentanone 10 l U | 591-78-6----2-Hexanone_ 10 | U 127-18-4----Tetrachloroethene 5 I U | 79-34-5----1, 1, 2, 2-Tetrachloroethane_ 5 l U | 108-88-3----Toluene 1 IJ | 108-90-7-----Chlorobenzene 5 I U | 100-41-4-----Ethylbenzene I U | 100-42-5----Styrene_ 5 1 U 1330-20-7----Total Xylenes U 1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

VBLK1

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: VSB1005F

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: VSB1005F

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 10/05/90

Column (pack/cap) CAP

Dilution Factor: 1

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NUMBER COMPOUND NAME | EST. CONC. | RT

SBLK1

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: LSB0927C

Sample wt/vol: 30.0 (g/mL) G Lab File ID: LSB0927C

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y pH: Dilution Factor: 1.0

CAS NO.	COMPOUND						
	CORPOUND	(ug/L	or	ug/Kg)	UG/KG	•	Q
				ł		1	1
108-95-2	Phenol				660	IU	Į.
111-44-4	bis(2-Chloroe	thyl)Ether_		!		•	ļ
95-57-8	2-Chloropheno	1		!	•		. !
541-73-1	1, 3-Dichlorob	enzene		I			Į.
108-46-7	1, 4-Dichlorob	enzene		1		• -	1
100-51-6	Benzyl Alcoho	1		{		•	- 1
95-50-1	1, 2-Dichlorob	enzene		!		•	- 1
95-48-7	2-Methylpheno	1		1	660	-	1
39638~32-9	bis(2-Chloroi	sopropyl)Et	her	''	660	IU	- 1
106-44-5	4-Methylpheno	1		1	660	l U	1
621-64-7	N-Nitroso-Di-	n-Propylami	ne_		660	ľŪ	1
67-72-1	Hexachloroeth	ane				ľ	- 1
98-95-3	Nitrobenzene_			1	660	ľŪ	1
78-59-1	Isophorone			1	660	ĮŪ	- 1
88-75-5	2-Nitrophenol			1	660	ľU	- 1
105-67-9	2, 4-Dimethylp	henol		1	660	ľŪ	- 1
65-85-0	Benzoic Acid_			1	3200	ΙŪ	1
111-91-1	bis(2-Chloroe	thoxy)Metha	ne	1	660	ΙŪ	1
120-83-2	2, 4-Dichlorop	henol		<u> </u>	660	Į U	l l
120-82-1	1, 2, 4-Trichlo	robenzene		<u> </u>	660	· U	i
91-20-3	Naphthalene			1	660	Į U	1
106-47-8	4-Chloroanili	ne			660	U	- 1
87-68-3	Hexachlorobut	adiene		i	660	U	1
59-50-7	4-Chloro-3-Me	t hylphenol	_	i	660	U	1
91-57-6	2-Methylnapht	halene		i	660	U	1
77-47-4	He xachlor ocyc	lopentadien	e	1	660	ľŪ	1
88-06-2	2, 4, 6-Trichlo	rophenol		i	660	U	ļ
95-95-4	2, 4, 5-Trichlo	rophenol		1	3200	∤ U	1
91-58-7	2-Chloronapht	halene		1	660	ĮΨ	1
88-74-4	2-Nitroanilin	e		1	3200	ľ	1
131-11-3	Dimethyl Phth	alate		1	660	IU	1
208-96-8	Acenaphthylen	e		I	660	Į U	1
	95-57-8 541-73-1 108-46-7 100-51-6 95-50-1 95-48-7 39638-32-9 106-44-5 621-64-7 98-95-3 78-59-1 88-75-5 105-67-9 111-91-1 120-83-2 120-82-1 91-20-3 120-83-2 120-82-1 91-57-6 91-57-6 91-57-6 91-58-7 88-74-4 131-11-3	95-57-82-Chloropheno 541-73-11, 3-Dichlorob 108-46-71, 4-Dichlorob 100-51-6Benzyl Alcoho 95-50-11, 2-Dichlorob 95-48-7	95-57-8	95-57-82-Chlorophenol 541-73-11, 3-Dichlorobenzene 108-46-71, 4-Dichlorobenzene 100-51-6Benzyl Alcohol 95-50-11, 2-Dichlorobenzene 95-48-72-Methylphenol 39638-32-9bis (2-Chloroisopropyl)Ether 106-44-5	39638-32-9bis (2-Chlorois opropyl) Ether 106-44-54-Methylphenol 621-64-7Nitroso-Di-n-Propylamine 67-72-1Hexachloroethane 98-95-3Nitrobenzene 78-59-1Is ophorone	95-57-8 2-Chlorophenol 660 541-73-1 1,3-Dichlorobenzene 660 108-46-7 1,4-Dichlorobenzene 660 100-51-6 Benzyl Alcohol 660 95-50-1 1,2-Dichlorobenzene 660 95-48-7 2-Wethylphenol 660 39638-32-9 bis (2-Chloroisopropyl) Ether 660 106-44-5 4-Methylphenol 660 621-64-7 Nitroso-Di-n-Propylamine 660 67-72-1 Hexachloroethane 660 98-95-3 Nitrobenzene 660 78-59-1 Isophorone 660 88-75-5 2-Nitrophenol 660 105-67-9 2,4-Dimethylphenol 660 65-85-0 Benzoic Acid 3200 111-91-1 bis (2-Chloroethoxy) Methane 660 120-83-2 2,4-Dichlorophenol 660 120-83-2 3-2-2 4-Dichlorophenol 660 120-83-1 1,2,4-Trichlorobenzene 660 91-20-3 Naphthalene 660 <	95-57-8

SBLK1

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: LSB0927C

Sample wt/vol: 30.0 (g/mL) G Lab File ID: LSB0927C

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y pH: Dilution Factor: 1.0

			CONCENTRA	ATION UNITS:		
	CAS NO.	COMPOUND	(ug/L or	ug/Kg) UG/KG	Q	
1				1	ı	1
i	99-09-2	3-Nitroaniline		3200	เบ	i
i	83-32-9	Acenaphthene 2, 4-Dinitrophe 4-Nitrophenol		660	Ü	j
i	51-28-5	2. 4-Dinitrophe	nol	3200	เบ	i
i	100-02-7	4-Nitrophenol		3200	• -	i
i	132-64-9	Dibenzofuran		660	ĬŪ	i
Ĺ	121-14-2	2, 4-Dinitrotol	uene	660	Ü	i
i	606-20-2	2, 6-Dinitrotol	uene	660	ĺŪ	i
İ	84-66-2	Diethylphthala	t e	660	ĺΰ	İ
Ì	7005-72-3-	4-Chlorophenyl	-phenylether	1 660	įυ	i
Í	86-73-7	Fluorene		660	Ü	1
1	100-10-6	4-Nitroaniline		3200	ľU	İ
i	534-52-1	4-Nitroaniline 4,6-Dinitro-2-	Methylphenol	3200	U	i
Ì	86-30-6	N-Nitrosodiphe	nylamine (1)	660	Ü	1
-	101-55-3	4-Bromophenyl-	phenylether_	660	U	1
İ	118-74-1	Hexachlorobenz	ene	660	ĮŪ	Ì
i	87-86-5	Pentachlorophe	nol	3200	Ü	İ
Ť	85-01-8	Phenant brene		1 660	U	1
i	120-12-7	Anthracene Di-n-Butylphth		680	ľŪ	ı
ĺ	84-74-2	Di-n-But yl pht h	alate	660	Ū	1
1	206-44-0	Fluoranthene		i 660	וטן	1
ł	129-00-0	Pvrene		1 860	l U	1
1	85-68-7	Butylbenzylpht 3,3'-Dichlorob	halate	1 660	וט	1
-	91-94-1	3, 3'-Dichlor ob	enzidine	1300	ľŪ	ł
-	56-55-3	Benzo(a)Anthra	cene	(660	ΙŪ	1
-	117-81-7	bis(2-Ethylhex	yl)Phthalate	1 660	l U	1
1	218-01-9	Chrysene		1 660	1 U	ı
-	117-84-0	Di-n-Octyl Pht	halate	1 660	Į U	1
-1	205-99-2	Benzo(b)Fluora	nthene	I 660	l U	ŀ
l	207-08-9	Benzo(k)Fluora	nt hene	! 660	Į U	ı
1	50-32-8	Benzo(a)Pyrene		I 660	ł U	ı
1	193-39-5	Benzo(a)Pyrene Indeno(1, 2, 3-c	d)Pyrene	660	U	- 1
1	53-70-3	Dibenz(a,h)Ant	hracene	660	l U	t
1	191-24-2	Benzo(g, h, i)Pe	rylene	660	ĮŪ	!
Į,				!	l	_!
(1) - Cannot	be separated from D	iphenylamine			

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SBLK1

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: LSB0927C

Sample wt/vol: 30.0 (g/mL) G

Lab File ID:

LSB0927C

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y pH:

Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NUMBER |

COMPOUND NAME

| EST. CONC. |

FORM I SV-TIC

EPA SAMPLE NO.

SBLK2

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: LSB1004D

Sample wt/vol: 30.0 (g/mL) G Lab File ID: LSB1004D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Extracted: 10/04/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: Dilution Factor: 1.0

CONCENTRATION UNITS:

AS NO. COMPOUND (ug/L or ug/		(/Kg) UG/KG	Q
108-95-2	Phenolbis(2-Chloroethyl)Ether	 660	[U
111-44-4	bis(2-Chloroethyl)Ether	660	ן ט
95-57-8	Bis (2-Chloroethyl)Ether2-Chlorophenol1, 3-Dichlorobenzene1, 4-DichlorobenzeneBenzyl Alcohol1, 2-Dichlorobenzene	660	U
541-73-1	1, 3-Dichlorobenzene	660	U
106-46-7	1, 4-Dichlorobenzene	_1 660	ľ
100-51-6	Benzyl Alcohol	1 660	ľ
95-50-1	1, 2-Dichlorobenzene	660	U
95-48-7	2-Methylphenol bis(2-Chloroisopropyl)Ether	660	l U
39638-32-9	bis(2-Chloroisopropyl)Ether_	660	1 U
106-44-5	4-Methylphenol	_ 660) U
621-64-7	4-Methylphenol	660	U
67-72-1	Herachloroethane	1 660	ľ
98-95-3	Nitrobenzene	660	U
78-59-1	Isophorone	660	U
88-75-5	NitrobenzeneIsophorone2-Nitrophenol2, 4-DimethylphenolBenzoic Acid	660	U
105-67-9	2, 4-Dimethylphenol	660	Ü
65-85-0	Benzoic Acid	3200	IU
111-91-1	bis (2-Chloroethoxy) Methane2, 4-Dichlorophenol1, 2, 4-TrichlorobenzeneNaphthalene	660	
120-83-2	2, 4-Dichlorophenol	660	•
120-82-1	1, 2, 4-Trichlorobenzene	660	•
91-20-3	Napht halene	660	•
100-41-0		I BBII	iŪ
87-68-3	Hexachlorobutadiene	660	ίŪ
59-50-7	Hexachlorobutadiene	660	ίŪ
91-57-6	2-Met hylnapht halene	-i 660	IU
77-47-4	Hexachlorocyclopentadiene	_i 660	1 77
88-06-2	2.4.6-Trichlorophenol	660	เบ
95-95-4	2, 4, 5-Trichlorophenol	3200	ίŬ
91-58-7	2, 4, 6-Trichlorophenol2, 4, 5-Trichlorophenol2-Chloronaphthalene2-NitroanilineDimethyl Phthalate	660	iŭ
88-74-4	2-Nitroaniline	3200	Ü
131-11-3	Dimethyl Phthalate	660	ľŪ
200-06-0	Acenapht hylene	660	Ü

SBLK2

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: LSB1004D

Sample wt/vol: 30.0 (g/mL) G Lab File ID: LSB1004D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Extracted: 10/04/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: Dilution Factor: 1.0

		,				
			TION UNITS:			
	CAS NO.	COMPOUND		ig/Kg) UG/KG		Q
		33-13-531-2	(-6/- 01 (-8, 118, 00, 110		•
1				1	ı	1
1	99-09-2	3-Nitroaniline	.	3200	Ü	İ
-	83-32-9	Acenaphthene		660	ĬŪ	i
ĺ	51-28-5	2, 4-Dinitropho	enol	3200	U	i
-	100-02-7	Acenaphthene_ 2, 4-Dinitrophe 4-Nitrophenol		3200	ľ	ĺ
i	132-64-9	Dibenzoiuran		1 660	ľŪ	1
- [121-14-2	2, 4-Dinitroto	luene	660	ΙŪ	1
į	606-20-2	2,6-Dinitroto	luene	1 660	ΙŪ	1
1	84-66-2	Diethylphthals	ite	1 660	ľ	1
- (7005-72-3	4-Chloropheny:	l-phenylether	1 660	ľŪ	1
1	86-73-7	Fluorene		660	1 U	1
	100-10-6	4-Nitroaniline)	3200	ľŪ	1
- 1	534-52-1	4-Nitroaniline 4,6-Dinitro-2- N-Nitrosodiphe	-Methylphenol	(3200	ľŪ	.
- 1	86-30-6	N-Nitrosodipho	enylamine (1)_	660	U	1
- (101-55-3	4-Bromophenvl-	-phenylether	660	ľ	1
١	118-74-1	He xa chlor oben:	zene	660	ΙU	1
- {	87-86-5	Pentachloropho	enol	1 3200	ľ	1
١	85-01-8	Phenant brene		660	ľŪ	Ì
- {	120-12-7	Anthracene		1 660	ΙŪ	1
- 1	84-74-2	D1-n-But ylphti	nalate	1 660	U	ı
- 1	206-44-0	Fluoranthene_		660	וטן	1
- (129-00-0	Pyrene	·	660	וטן	1
- (85-68-7	Butylbenzylphi	halate	660	ľ	1
١	91-94-1	3.3'-D1Ch1orol	penzidine	1 1300	ĮŪ	1
- 1	56-55-3	Benzo(a)Anthra bis(2-Ethylhe	cene	I 660	1 U	1
İ	117-81-7	bis(2-Ethylhe:	ryl)Phthalate_	660	ľŪ	1
- (218-01-9	Chrysene Di-n-Octyl Phi		I 660	l U	1
- 1	117-84-0	Di-n-Octyl Phi	halate	660	ľ	1
- 1	205-99-2	Benzo(b)Fluore	inthene	660	וט	ļ
- 1	207-08-9	Benzo(k)Fluora	inthene	660	ľŪ	ļ
į	50-32-8	Benzo(a)Pyrene	9	660	ľ	Į.
	193-39-5	Indeno(1, 2, 3-c	d)Pyrene	660	U	ļ
- !	53-70-3	Dibenz(a, h)Ani	hracene	i 660	I V	ļ
	191-24-2	Benzo(g, h, i)Po	erylene	! 660	וּט	!
Į	(4)	he consusted from i	N - N 1 1	_!	!	
	BDDAT	na consestan team				

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: ENCOTEC-AA	_ Contract:	68-D9-0033	
Lab Code: ENCOT Case No.: 14960	SAS No.:	SDG 1	No.: <u>EHQ42</u>
Matrix: (soil/water) SOIL		Lab Sample ID:	LSB1004D
Sample wt/vol: 30.0 (g/mL)	<u>G</u>	Lab File ID:	LSB1004D
Level: (low/med) LOW		Date Received:	
% Moisture: not dec dec.	-	Date Extracted:	10/04/90
Extraction: (SepF/Cont/Sonc)	SONC	Date Analyzed:	10/23/90
GPC Cleanup: (Y/N) Y pH:		Dilution Factor:	1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found: 2

CAS NUMBER	COMPOUND NAME	 RT	EST. CONC.	Q
11	UNKNOWN UNKNOWN	3.88	400 400	
1	l	.11	l	II

Lab Name: ENCOTEC-AA Contract: 68-D9-0033 Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42 Matrix: (soil/water) SOIL Lab Sample ID: MB100490-1 Sample wt/vol: <u>30.0</u> (g/mL) G Lab File ID: Level: (low/med) LOW Date Received: % Moisture: not dec. ___ dec. _ Date Extracted: 10/04/90 Extraction: (SepF/Cont/Sonc) SONC_ Date Analyzed: <u>10/24/90</u> GPC Cleanup: (Y/N) <u>Y</u> pH: <u>7.0</u> Dilution Factor: 1.00

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) <u>UG/KG</u> Q | 319-84-6-----alpha-BHC 16 ΙU | 319-85-7-----beta-BHC______ 16 ŧυ : 319-86-8-----delta-BHC______ 16 l U | 58-89-9-----Lindane 16 lU. 76-44-8-----Heptachlor____: 16 : U | 309-00-2------Aldrin_____| 16 l U | 1024-57-3-----Heptachlor epoxide_____| 16 10 | 959-98-8-----Endosulfan I_____; 16 l U | 60-57-1-----Dieldrin_____ ¦U 32 1 72-55-9-----4,4'-DDE______ 32 l U | 72-20-8-----Endrin____| | 33213-65-9-----Endosulfan II_____| 32 :U 32 :U 1 72-54-8-----4,4'-DDD_____I 32 ! U | 1031-07-8----Endosulfan sulfate_____ 32 111 32 l U | 72-43-5-----Methoxychlor_____ 160 ! U : 53494-70-5----Endrin ketone_____ 32 ! U : 5103-71-9-----alpha-Chlordane_____: 160 : U : 5103-74-2----gamma-Chlordane_____: 160 111 | 8001-35-2----Toxaphene_____| 320 l U | 12674-11-2----Aroclor-1016_____| l U 160 | 11104-28-2----Aroclor-1221______| 160 :U | 11141-16-5----Aroclor-1232_____| 160 :U | 53469-21-9-----Aroclor-1242_____| 160 10 | 12672-29-6----Aroclor-1248_____| 160 10 ! 11097-69-1----Aroclor-1254_____: l U 320 | 11096-82-5----**-Ar**oclor-1260_____| 320 :U

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; n	, Pose	:				9ZI-40	⊬\ 1007A	5-28	- 960 I	I!
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		:di əi	H del		 9	(Jm/Ē)	0.05	:	[00/4	w elqms2
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	;	<u> </u>	e8-D	:toextno	- c:			OTEC-AA	ENC	amsN ds√l
-KF I	! J89		ıa	3H8 8180	ı etel	JANA ⊜	าเทคยหน	SLICIDE	∃ .d	
SAMPLE	₽₽A		13	VIV		ID (I		7410170		

1/87 Rev.

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ42V

Sample wt/vol:

 $5.0 \quad (g/mL) G$

COMPOUND

Lab File ID: EHQ42V

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 20

CAS NO.

Date Analyzed: 10/05/90

Column: (pack/cap) CAP

Lab Code: ENCOT Case No.: 14960

Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

	0.10	(46, 2)	8, 118,, 110		•	
ļ			1		i	1
J	74-87-3	Chloromethane	11		ľ	1
1	74-83-9	Bromomethane	1 1	13	U	1
- 1	75-01-4	Vinyl Chloride	1	13	U	l
İ	75-00-3	Vinyl Chloride	1 :	13	U	1.
- 1	75-09-2	metnylene Unioride		6	ľ	1
1	67-64-1	Acet one	1	13	l U	1
- {	75-15-0	Carbon Disulfide		6	U	İ
	75-35-4	1,1-Dichloroethene	ł	6	U	1
- 1	75-35-3	1, 1-Dichlor oet hane	1	6	Į V	1
1	540-59-0	(Total)-1, 2-Dichlor oethen	e	6	l U	1
- 1	67-66-3	Chloroform_ 1, 2-Dichloroethane		6	ľŪ	1
ì	107-06-2	1, 2-Dichloroethane		6	l U	1
1	78-93-3	2-Butanone	1 1	13	ľ	l
- 1	71-55-6	1, 1, 1-Trichioroethane	1	6	U	1
ĺ	56-23-5	Carbon Tetrachloride	1	6	l U	1
ĺ	108-05-4	Vinyl Acetate	1	13	U	1
1	75-27-4	Bromodichloromethane	_	6	U	1
ı	78-87-5	1,2-Dichloropropane		6	U	1
i	10061-01-5	cis-1.3-Dichloropropene	1	6	U	1
i	79-01-6	Trichloroethene		6	Ū	1
i	124-48-1	Trichloroethene	i	6	U	i
i	79-00-5	1, 1, 2-Trichloroethane			U	i
i	71-43-2	Benzene	i		Ü	i
i	10061-02-6	Benzenetrans-1,3-Dichloropropene	i		Ü	i
i	75-25-2	Bromoform	;		Ü	i
i	108-10-1	4-Methyl-2-Pentanone			เบ	i
i	591-78-6	2-Hexanone Tetrachloroethene 1, 1, 2, 2-Tetrachloroethane			เบ็	i
i	127-18-4	Tetrachloroethene	'		Ü	i
i	79-34-5	1.1.2.2-Tetrachloroethane	 ;		Ū	i
i	108-88-3	Toluene	;		Ü	i
į	108-90-7	Toluene	 i		เบ็	i
	100-41-4	Et hyl benzene	 ;		Ü	i
i	100-42-5	Styrene	i		Ü	i
į	1330-20-7	Styrene	;		ĺΰ	i
i			i	_	i	i

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ42 Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ42V

Sample wt/vol: $5.0 \quad (g/mL) G$ Lab File ID: EHQ42V

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 20 Date Analyzed: 10/05/90

Column (pack/cap) CAP Dilution Factor: 1.0

CONCENTRATION UNITS:

Number TICs found: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND	NAME	 RT	 EST.	CONC.	
	======================================		*********	=======	=====	======	=====
1					<u></u>	l	·I

EHQ43V

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID:

Case No.: 14960

Lab Code: ENCOT

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EHQ43V

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 17 Date Analyzed: 10/05/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CONCENTRATION UNITS:

		CONCENTR	WIION ON	IID.	
CAS NO.	COMPOUND	(ug/L or	ug/Kg)	UG/KG	Q
74-97-9	Chlomomothano		Ţ	12	 U
74-07-3	Chloromethane_		——¦		•
75-01-4	Bromomethane_		<u>-</u> ¦	12	U
75-01-4	Vinyl Chloride		\ .		U
75 00 0	Chloroethane		<u> </u>	12	U
75-US-Z	Methylene Chlo	ride	<u>-</u> !	6	U
57-64-1	Acetone Carbon Disulfi	 	!	12	U
75-15-0	Carbon Disuifi	ge	 !	_	U
75-35-4	1, 1-Dichloroet	nene	!	6	ĮŪ
75-35-3	1,1-Dichloroet	hane	!		U
540-59-0	(Total)-1, 2-Di	chloroethene _.		6	U
67-66-3	Chloroform_		!	6	U
107-06-2	1,2-Dichloroet	hane		6	U
78-93-3	2-Butanone			12	U
71-55-6	1, 1, 1-Trichlor	oethane	1	6	ľ
56-23-5	Carbon Tetrach	loride	l	6	U
108-05-4	Vinyl Acetate_		1	12	U
75-27-4	Bromodichlorom	ethane	1	6	U
78-87-5	1, 2-Dichloropr	opane	1	6	ľ
10061-01-5	cis-1, 3-Dichlo	ropropene	i	6	U
79-01-6	Trichloroethen	e	1	6	U
124-48-1	Dibromochlorom	et hane	i	6	Ü
79-00-5	1, 1, 2-Trichlor	oet hane	;		บ
71-43-2	Benzene		 ;		เบ็
10061-02-6	trans-1, 3-Dich	loropropene	 ;	6	เบ็
75-25-2	Bromoform_	ror opropenc_	;	_	Ü
108-10-1	4-Methyl-2-Pen	tanone	¦		Ü
591-78-6	2-Hexanone	canone	 ¦		Ü
197-18-4	Tetrachloroeth	<u> </u>	<u>'</u>	6	Ü
70-24-5	1, 1, 2, 2-Tetrac	hloroothana	¦	6.	-
100-00-2	T, I, Z, Z Tetrac	mioroethane_	 ¦ ·	_	•
100-00-3	Toluene	·	<u>-</u>	6 6	U U
100-30-1	Chlorobenzene		¦	6	• -
100-41-4	Et hylbenzene		<u> </u>	0	U
1220-20-7	Styrene		!	0	U
1330-20-1	Total Xylenes_			6	U

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ43

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ43V

Sample wt/vol: $5.0 \quad (g/mL) G$ Lab File ID: EHQ43V

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. . 17 Date Analyzed: 10/05/90

(pack/cap) Dilution Factor: 1.0 Column

CONCENTRATION UNITS:

Number TICs found: (ug/L or ug/Kg) UG/KG

		1	l !	
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
11. 110-43-0	2-HEPTANONE	9.72	9 I	J
1		l	l	اا

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ44V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EHQ44V

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 19 Date Analyzed: 10/05/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CONCENTRATION UNITS:

		•	CUNCENTR	AIIUN UI	4112:		
	CAS NO.	COMPOUND	(ug/L or	ug/Kg)	UG/KG	Q	
1				1		1	ı
i	74-87-3	-Chloromethane		i ·	12	Ü	i
i	74-83-9	-Bromomethane		i	12	Ü	i
ĺ	75-01-4	-Vinyl Chloride		i		Ü	i
Ì	75-00-3	-Chloroethane				Ü	i
Ì	75-09-2	-Methylene Chloride	<u>)</u>	1		Ü	i
Ì	67-64-1	-Acetone -Carbon Disulfide_		i		U	i
Ì	75-15-0	-Carbon Disulfide		i		U	i
Ì	75-35-4	-1,1-Dichloroethene	•	—-i	6	Ū	i
ĺ	75-35-3	-1,1-Dichloroethane)	1	6	Ü	i
1	540-59-0	-(Total)-1.2-Dichle	roethene		6	U	i
ĺ	67-66-3	-Chloroform		1	6	U	İ
1	107-06-2	-1,2-Dichloroethane	•		6	IU	i
- [78-93-3	-2-Butanone		1	12	U	ĺ
1	71-55-6	-1,1,1-Trichloroeth	ane		6	Ū	i
İ	56-23-5	-Carbon Tetrachlori	de	1		Ü	i
1	108-05-4	-Vinyl Acetate		1		U	Ì
1	75-27-4	-Bromodichlorometha	ne	I		Ü	i
1	78-87-5	-1,2-Dichloropropar	ne		6	U	Ť.
1	10061-01-5	-cis-1,3-Dichloropr	opene	I	6	Ü	i
1	79-01-6	-Trichloroethene		l	6	Ü	i
Ì	124-48-1	-Dibromochlorometha	ne	- -i		Ü	i
Ì	79-00-5	-1,1,2-Trichloroeth	nane			Ü	i
i	71-43-2	-Benzene		1		Ü	i
Ì	10061-02-6	-trans-1, 3-Dichlor	propene			U	i
ĺ						U	Ì
Ì	108-10-1	-4-Methyl-2-Pentano	ne	i		Ū	i
Í	591-78-6	-2-Hexanone -Tetrachloroethene -1,1,2,2-Tetrachlor		—-i		Ü	i
Ì	127-18-4	-Tetrachloroethene				ับ	İ
1	79-34-5	-1, 1, 2, 2-Tetrachlor	oethane	 i	6	U	1
1	108-88-3	-Toluene		i		U	i
1	108-90-7	-Toluene -Chlorobenzene		<u> </u>	6	U	1
1	100-41-4	-Ethylbenzene			6	U	1
1	100-42-5	-Styrene		1	6	l U	i
ı	1330-20-7	-Styrene -Total Xylenes			6	l U	1
1		······································				l	_1

1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ44

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Level: (low/med) LOW

Lab Sample ID: EHQ44V

Sample wt/vol:

5.0 (g/mL) G

Lab File ID:

EHQ44V

Date Received:

09/26/90

% Moisture: not dec. 19

Date Analyzed: 10/05/90

Column (pack/cap) CAP

Dilution Factor: 1.0

CONCENTRATION UNITS:

Number TICs found:

(ug/L or ug/Kg) UG/KG

1						1			1	1
1	CAS NUMBER	1	COMPOUND NAME	1	RT	E	ST.	CONC.	1	Q
i	==========	==		== ===	=====	===	===:	======	==	===1
İ		i		i		i			.i	i

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ45V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EHQ45V

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 31 Date Analyzed: 10/05/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	(ug/L or	ug/Kg) UG	i/KG	Q
	l			1		1
	74-87-3	Chloromethane_		1	14	וטו
	74-83-9	Bromometnane			14	ľ
	(5-01-4	vinyi Chioride			14	U
i	75-00-3	Chloroethane		I	14	U
	75-09-2	Methylene Chlor	·ide		7	_ <u></u>
	67-64-1	Acetone Carbon Disulfic		I	11	1]
	75-15-0	Carbon Disulfic	le		7	U
	75-35-4	1,1-Dichloroetl	iene		7	וטן
	75-35-3	1,1-Dichloroeti	nane	1	7	U
i	540-59-0	(Total)-1, 2-Dic	chloroethene_		7	l U
J	67-66-3	Chloroform 1,2-Dichloroetl	·	1	7	U
ĺ	107-06-2	1, 2-Dichloroetl	nane		7	l U
- 1	78-93-3	2-Butanone		1	14	'I U
İ	71-55-6	2-Butanone	oethane	!	7	Į U
1	56-23-5	Carbon Tetrachl	loride		7	U
	108-05-4	Vinyl Acetate_		i	14	ľ
- 1	75-27-4	Bromodichlorome	ethane		7	T U
	78-87-5	1, 2-Dichloropro	pane	1	7	ľ
- 1	10061-01-5-	cis-1, 3-Dichlor	opropene	1	7	U
	79-01-6	Trichloroethene	•	ı	7	ľŪ
-	124-48-1	Dibromochlorome	ethane	1	7	U
	79-00-5	1, 1, 2-Trichlor	oethane		7	ľŪ
ı	71-43-2	Benzene		i	7	U
ļ	10061-02-6-	Benzene trans-1, 3-Dichl	oropropene		7	IU
1	75-25-2	Bromoform		1	7	U
	108-10-1	4-Methvl-2-Peni	anone	1	14	U
i	591-78-6	2-Hexanone		1	14	U
	127-18-4	Tetrachloroethe	ene		7	U
i	79-34-5	1, 1, 2, 2-Tetrach	loroethane		7	U
Ì	108-88-3	Toluene		I	7	U
- 1	108-90-7	Toluene		1	7	U
	100-41-4	Ethylbenzene			7	U
Ì	100-42-5	St yrene		<u> </u>	7	U
	1330-20-7	Styrene Total Xylenes_		1	7	U
				i		_

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

					1	EHQ45
Lab	Name:	ENCOTEC-AA	Contract:	68-D9-0033	1_	

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHO42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ45V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EHQ45V

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 31 Date Analyzed: 10/05/90

Column (pack/cap) CAP Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found: __5

CAS NUMBER	 COMPOUND	NAME	RT	EST. CONC.	 Q
1.	UNKNOWN UNKNOWN UNKNOWN UNKNOWN UNKNOWN		7.72 19.03 19.73 20.35 20.75	20 40 10 10	J J J J J

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Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ46V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EHQ46V

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 37 Date Analyzed: 10/05/90

Column: (pack/cap) CAP Dilution Factor: 1.0

COMPOUND (NG (L or NG (KG) NG (KG

		CONCENTRATION	OMIID:		
CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q	
1		1		f	1
74-87-3	Chloromethane		16	ับ	1
74-83-9	Bromomethane_		16	เบ็	i
75-01-4	Vinyl Chlorid	e '	16	ี่บั	i
75-00-3	Chloroethane		16	เบ็	ì
75-09-2	Methylene Chl	oride	8	Ü	i
			16	บ	i
75-15-0	Acetone_ Carbon Disulf	ide	8	Ü	i
75-35-4	1, 1-Dichloroe	thene	8	iŪ	i
75-35-3	1, 1-Dichloroe	thane	8	Ü	i
540-59-0	(Total)-1.2-D	ichloroethene	8	iŪ	i
67-66-3	Chloroform		8	Ü	i
		thane	8	U	i
78-93-3	2-Butanone		16	Ü	i
	1, 1, 1-Trichlo	roethane	. 8	Ü	i
56-23-5	Carbon Tetrac	hloridei	8	Ü	i
108-05-4	Vinyl Acetate		16	ับ	i
75-27-4	Bromodichloro	methanei	8	Ü	i
78-87-5	1, 2-Dichlorop	ropane	8	Ü	j
10061-01-5-	cis-1, 3-Dichl	oropropenei	8	ับ	j
79-01-6	Trichloroethe	ne	8	Ü	ì
124-48-1	Dibromochloro	methane	8	Ū	ì
79-00-5	1, 1, 2-Trichlo	roethane	8	Ü	j
71-43-2	Benzene		8	Ü	İ
10061-02-6-	trans-1, 3-Dic	hloropropene	8	U	i
75-25-2	Bromoform	1	8	Ū	j
108-10-1	4-Methyl-2-Pe	ntanone	16	ប	1
591-78-6	2-He xa none		16	U	
1 127-18-4	Tetrachloroet	hene	8	U	1
	1, 1, 2, 2-Tetra		8	U	1
108-88-3	Toluene		€ 2	LBJ 🖯	1/4/1/2
108-90-7	Chlorobenzene	Ī	8	U	12/1/19
100-41-4	Ethylbenzene_		8	ן ש	1
100-42-5	Styrene	1	8	U	
1330-20-7	Total Xylenes		8	U	1
	· · · · · · · · · · · · · · · · · · ·				_

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EHQ46

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ46V

Sample wt/vol: 5.0 (g/mL) G

Lab File ID:

EHQ46V

Date Received:

09/26/90

% Moisture: not dec. 37

Level: (low/med) LOW

Date Analyzed: 10/05/90

Column

(pack/cap) CAP

Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found:

CAS NUMBER	COMPOUND NAME	 RT	EST. CONC.	Q
1.	UNKNOWN	19.63	8 ! 	J

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ47V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EHQ47V

Level: (low/med) LOW Date Received: 09/26/90.

% Moisture: not dec. 18 Date Analyzed: 10/05/90

Column: (pack/cap) CAP Dilution Factor: 1.0

		CONCENTRATION UNITS:	
NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	

C	CAS NO.		CONCENTRA (ug/L or			Q
ı				1		
7	4-87-3	Chloromethane		i	12	iv i
i 7	4-83-9	Chloromethane Bromomethane Vinyl Chloride		'i	12	iŭ i
					12	iŭ i
7	5-00-3	-Chloroethane		—-;	12	ا بنا
7	75-09-2	Methylene Chloride		;	2	13 \
i 6	37-64-1	Acetone		i	12	TU i
i 7	5-15-0	Acetone Carbon Disulfide		—- _i	6	i u i
i 7	'5-35- 4	1,1-Dichloroethene		i	6	IU i
í 7	75-35-3	1,1-Dichloroethane		i	6	iv i
] 5	40-59-0	(Total)-1, 2-Dichlo	roethene	i	6	i u
	37-66-3		-		6	iv i
j 1	07-06-2	1,2-Dichloroethane		i	6	iu i
7	8-93-3	-2-Butanone			12	i u
7	1-55-6	1,1,1-Trichloroeth	ane	i	6	IU i
5	56-23-5	Carbon Tetrachlori	d e	1	6	IU I
1	08-05-4	Vinyl Acetate			12	U
į 7	5-27-4	Bromodichlorometha	ne	i	6	iv i
7	8-87-5	1,2-Dichloropropan	е		6	iv i
j 1	.0061-01-5	cis-1,3-Dichloropr	opene	i i	6	เบ เ
7	79-01-6	Trichloroethene		i	6	IU I
1	24-48-1	Dibromochlorometha	ne	i	6	IU i
7	9-00-5	1,1,2-Trichloroeth	ane	i	6	iu i
					6	U
1	0061-02-6	Benzene_ trans-1,3-Dichloro	propene	i	6	IU i
7	5-25-2	Bromoform	· · —	i	6	IU I
1	.08-10-1	Bromoform -4-Methyl-2-Pentano	ne	i	12	U
į 5	91-78-6	2-Hexanone		i	12	U
1	27-18-4	Tetrachloroethene		i	6	IU i
7	9-34-5	1, 1, 2, 2-Tetrachlor	oethane	i	6	U
1	.08-88-3	Toluene			6	IU I
1	.08-90-7	Chlorobenzene		i	6	U
1	.00-41-4	-Et hylbenzene		1	6	IU I
1	.00-42-5	Styrene			6	U
1	. 330-20-7	Total Xylenes			6	U
ا						.11

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VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ47

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ47V

Sample wt/vol:

 $5.0 \quad (g/mL) G$

Lab File ID:

EHQ47V

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 18

Date Analyzed: 10/05/90

Column (pack/cap) CAP

Dilution Factor: 1.0

CONCENTRATION UNITS:

Number TICs found:

(ug/L or ug/Kg) UG/KG

i	l	i	I	i !	
CAS NUMBER	COMPOUND NAME	RT	EST. CONC	. Q	
======================================	======================================	=======		== ====!	
1	1	1	;	1 1	
	.	·	·		

Matrix: (soil/water) SOIL

EHQ48 Contract: <u>68-D9-0033</u> Lab Name: ENCOTEC-AA

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Lab Sample ID: EHQ48V $\underline{5.0}$ (g/mL) \underline{G} Sample wt/vol: Lab File ID: EHQ48V

(low/med) LOW___ Level: Date Received: 09/26/90

% Moisture: not dec. 6 Date Analyzed: <u>10/05/90</u>

Column: (pack/cap) CAP Dilution Factor: 1.0

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG

· · · · · · · · · · · · · · · · · · ·	1	·
Chloromethane	11	 U
Bromomethane	11	เบ
Vinyl Chloride		U
Chloroethane	i 11	<u>i U</u>
Methylene Chloride	1	17 7
		I U
Carbon Disulfide		ľŪ
1, 1-Dichloroethene	1 5	U
1,1-Dichloroethane	5	U
(Total)-1,2-Dichloroethene	l 5	l U
Chloroform	5	ľŪ
1, 2-Dichloroethane	l 5	ľŪ
2-Butanone	11	U
1, 1, 1-Trichloroethane	5	U
Carbon Tetrachloride	1 5	U
Vinyl Acetate	11	l U
Bromodichloromethane	5	l U
1, 2-Dichloropropane	5	ľŪ
cis-1, 3-Dichloropropene	5	Ü
Trichloroethene	5	Ü
Dibromochloromethane		U
1, 1, 2-Trichloroethane	5	ĺΰ
Benzene	i 5	įυ
trans-1, 3-Dichloropropene	.5	ľU
Bromoform	i 5	Ü
4-Methyl-2-Pentanone	11	U
2-Hexanone		Ü
Tetrachloroethene	1 5	U
1, 1, 2, 2-Tetrachloroethane	i 5	Ü
Toluene	5	Ü
Chlorobenzene	5	10_
Et hyl benzene	4	[] J
Styrene		U
Total Xylenes	$\overline{}$)
	BromomethaneVinyl ChlorideChloroethaneMethylene ChlorideAcetoneCarbon Disulfide1,1-Dichloroethene1,1-Dichloroethane(Total)-1,2-Dichloroethene1,2-Dichloroethane1,1-Trichloroethane2-Butanone1,1,1-TrichloroethaneCarbon TetrachlorideVinyl AcetateBromodichloromethane1,2-DichloropropaneTrichloroetheneTrichloroetheneTrichloroethaneBenzeneBromoformBromoformBromoformBromoform	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ48

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ48V

Sample wt/vol:

 $5.0 \quad (g/mL) G$

Lab File ID:

EHQ48V

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 6

Date Analyzed: 10/05/90

Column (pack/cap) CAP

Dilution Factor: 1.0

CONCENTRATION UNITS:

Number TICs found:

(ug/L or ug/Kg) UG/KG

1	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
- 1	===============	====================================	=======	======================================	=====[
	ll	l	l		

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ49V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EHQ49V

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 9 Date Analyzed: 10/05/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO. COMPOUND COMP

		 .
74.87-3Chloromethane	11	
74-83-9Bromomethane	11	iū i
75-01-4Vinyl Chloride	11	iŭ
75-00-3Chloroethane	11	וֹט וֹ
75-09-2Methylene Chloride	5	וֹ עוֹ
67-64-1Acet one	11	iŭ i
67-64-1Acetone	5	i u i
75-35-41, 1-Dichloroethene	5	iū i
75-35-31, 1-Dichloroethane	5	ี เบ็า
540-59-0(Total)-1, 2-Dichloroethene	5	iū i
67-66-3Chloroform	5	iŭ i
107-06-21, 2-Dichloroethane	5	וֹט וֹ
78-93-32-Butanone	11	i u i
71-55-61, 1, 1-Trichloroethane	5	וֹט וֹ
56-23-5Carbon Tetrachloride	5	iŭ i
108-05-4Vinyl Acetate	11	וֹט וֹ
75-27-4Bromodichloromethane	5	ี่บี เ
78-87-51, 2-Dichloropropane	5	iŭ i
10061-01-5cis-1, 3-Dichloropropene	5	iù i
79-01-6Trichloroethene	5	iū i
124-48-1Dibromochloromethane	5	iŭ i
79-00-51, 1, 2-Trichloroethane	5	iŭ i
71-43-2Benzene	5	וֹ עוֹ
71-43-2Benzene	5	וֹטֹ וֹ
75-25-2Bromoform	5	וֹט וֹ
75-25-2Bromoform 108-10-14-Methyl-2-Pentanone	11	Ü
591-78-62-Hexanone	11	וֹט וֹ
127-18-4Tetrachloroethene	5	וֹט וֹ
79-34-51, 1, 2, 2-Tetrachloroethane		וֹ טוֹ
108-88-3Toluene	5	וֹט וֹ
108-90-7Chlorobenzene	5	ו טו
100-41-4Et hylbenzene	5	Ü
100-42-5St yrene	5	Ü
1330-20-7Total Xylenes	5	וֹט וֹ
	v	
		- ·

1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ49

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Sample wt/vol: 5.0 (g/mL) G

Lab Sample ID: EHQ49V

Lab File ID:

EHQ49V

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 9

Date Analyzed: 10/05/90

Column (pack/cap) CAP

Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found: 0

CAS NUMBER

COMPOUND NAME

EST. CONC.

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ50V

Sample wt/vol: $\underline{5.0}$ (g/mL) \underline{G} Lab File ID: $\underline{EHQ50V}$

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 20 Date Analyzed: 10/05/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CONCENTRATION UNITS:
CAS NO. COMPOUND (ug/L or ug/Kg) <u>UG/KG</u>

CAS NO.	COMPOUND	(ug/L or	ug/Kg)	<u>UG/KG</u>	Q
74-07-2	Chloromethane		1	13	l U
74-87-3 74-82-0	Buomomethane		¦	13	I U
75 04 4	Bromomethane_ Vinyl Chloride		<u>¦</u>	13	• -
				13	U U
75 00 3	Chloroethane <u>-</u> Methylene Chlo		¦		$-\frac{10}{1J}$
67-64-1	methylene chi(oride	 ¦	$\frac{1}{13}$	10
75-15-0	Carbon Disulfi	140	 ¦	6	1 U
75-25-4	1, 1-Dichloroet	hone	 ;	6	IU
75 75 75	1, 1-Dichlorde	. nene	<u>`</u> ;	_	I U
10-30-3	1,1-Dichloroet (Total)-1,2-Di	lable	¦	6 6	
04U-09-U	Chloroform	cnioroetnene_	 !	6	U U
6 (1, 2-Dichloroet	. hana	—- <u></u> !	Ī	·
101-06-2 70-02-2	1, 2-bichtoroet 2-Butanone	. па пе	¦	6 13].U
18-93-3 74 55 C	2-Butanone 1, 1, 1-Trichlor	e a a b b a m a	¦		• -
11-55-6	Carbon Tetracl	roethane	 !	6	U
56-23-5	Vinyl Acetate	nioriae	!	6	• -
108-05-4	Promodiable		<u>-</u> !	13	• -
75-27-4	Bromodichlorom	metnane		6	U
78-87-5	1, 2-Dichloropr	opane	 !	6	• -
10061-01-5	cis-1, 3-Dichlo			6	וַט
	Trichloroether		 !	6	ן <u>ט</u>
124-48-1	Dibromochloron	ethane	<u>!</u>	6	וט
79-00-5	<u>1</u> , 1, 2-Trichlor	oethane	!	6	U
71-43-2	Benzene	 _	!	6	טו
	trans-1,3-Dich			6	וט
75-25-2	Bromoform 4-Methyl-2-Per		}	6	U
108-10-1	4-Met hyl -2-Per	ntanone	!	13	U
591-78-6	2-He xanone	·	1	13	U
127-18-4	Tetrachloroeti	iene		6	וע
79-34-5	<u>1</u> , 1, 2, 2-Tetrac	chloroethane_		6	U
108-88-3	Toluene		!	6	וט
108-90-7	Chlorobenzene		I	6	U
100-41-4	Et hylbenzene		!	6	וַט
100-42-5	Styrene	· · · · · · · · · · · · · · · · · · ·		6	U
4 2 2 0 - 2 0 - 7	Total Xylenes			6	U

1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ50 Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ50V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EHQ50V

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 20 Date Analyzed: 10/05/90

Column (pack/cap) CAP Dilution Factor: 1.0

CONCENTRATION UNITS:

Number TICs found: 0 (ug/L or ug/Kg) UG/KG

CAS NUMBER COMPOUND NAME EST. CONC.

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ42B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ42B

Level: (low/med) LOW . Date Received: 09/26/90

% Moisture: not dec. 20 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

			CONCEN	ITRA	TION UN	NITS:		
	CAS NO.	COMPOUND	(ug/L	or	ug/Kg)	UG/KG		Q
1					1		1	. 1
i	108-95-2	-Phenol			i	830	ίυ	i
i	111-44-4	-bis(2-Chloroethyl)	Ether		i	830	ίŪ	i
Ĺ	95-57-8	-2-Chlorophenol				830	Ü	i
Ì	541-73-1	-1,3-Dichiorobenzer	1e		1	830	Ü	i
-	106-46-7	-1,4-Dichlorobenzer	1e		1	830	U	ĺ
1	100-51-6	Benzyl Alcohol			1	830	U	i
1	95-50-1	-1,2-Dichlorobenzer	1e			830	U	Ì
1						830	U	1
1	39638-32-9	-2-Methylphenol -bis(2-Chloroisopro	pyl)Et	her	1	830	U	1
1	106-44-5	-4-Methylphenol			i	830	ĮŪ	1
1	621-64-7	-N-Nitroso-Di-n-Pro	pylami	ne_	1	830	U	1
	67-72-1	-Hexachloroethane_			1	830	U	1
1	98-95-3	-Nitrobenzene			1	830	ľ	1
-	78-59-1	-Isophorone			I	830	ľ	1
1	88-75-5	-2-Nitrophenol			1	830	U	ı
- 1	105-67-9	-2-Nitrophenol -2,4-Dimethylphenol			1	830	U	
1	65-85-0	-Benzoic Acid -bis(2-Chloroethox;			!	4000	ľ	1
1	111-91-1	bis(2-Chloroethoxy)Metha	ne_	1	830	U	1
- 1	120-83-2	-2,4-Dichlorophenol -1,2,4-Trichlorober				830	U	1
1	120-82-1	-1, 2, 4-Trichlorober	zene		1	830	l U	1
ĺ	91-20-3	-Naphthalene			l l	830	l U	l
-1	100-41-0	-4-Chioroaniiine			1	830	U	ĺ
1	87-68-3	-Hexachlorobutadier -4-Chloro-3-Methylp	ne			830	U	1
l	59-50-7	-4-Chloro-3-Methylp	henol		I	830	U	
1	91-57-6	-2-Methylnaphthaler	1e			830	ΙŪ	i
1	77-47-4	-Hexachlorocycloper	itadien	e	1	830	ľ	1
1	88-06-2	-2, 4, 6-Trichlorophe	nol		<u> </u>	830	l U	1
1	95-95-4	·2,4,5-Trichlorophe	enol		1	4000	U	1
-	91-58-7	-2-Chlor onapht haler	1e		_	830	U	l
1	88-74-4	-2-Nitroaniline			1	4000	U	1
1	131-11-3	-Dimethyl Phthalate	3			830	ľ	1
-	208-96-8	Acenaphthylene				830	U	1
1_		. 					J	

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ42B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ42B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 20 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

CAS NO. COMPOUND (ug/L or ng/Kg) UG/KG

			CONCENTIA	HITOM ONLID.	
	CAS NO.	COMPOUND	(ug/L or	ug/Kg) UG/KG	Q
1				1	1 1
i	99-09-2	3-Nitroaniline	•	400	oo iu i
i	83-32-9	Acenaphthene		1 8:	30 IV i
i	51-28-5	2, 4-Dinitrophe	nol	400	•
i	100-02-7	4-Nitrophenol		1 400	·
i	132-64-9	Dibenzofuran		 i 8:	30 IU I
i	121-14-2	2, 4-Dinitrot ol	uene	i 83	30 IV i
İ	606-20-2	2,6-Dinitrotol	uene	1 8:	30 IU I
i	84-66-2	Diethylphthala	te	83	30 IU I
Ĺ	7005-72-3	·4-Chlorophenyl	-phenylether	1 8:	30 IV i
İ	86-73-7	Fluorene	_	8	30 IV I
İ	100-10-6	4-Nitroaniline		! 400	i ui oc
İ	534-52-1	4,6-Dinitro-2-	Methylphenol	400	ו טו סכ
I	86-30-6	N-Nitrosodiphe	nylamine (1)	8	30 U
ĺ	101-55-3	4-Bromophenyl-	phenylether	83	30 IU I
İ	118-74-1	Hexachlorobenz	ene	I 8:	30 IU I
ĺ	87-86-5	Pentachlorophe	nol	1 400	00 14 1
1	85-01-8	Phenanthrene		1 / 58	50 J
İ	120-12-7	Anthracene		1 18	30 J
1	84-74-2	·Di-n-Butylphth	alate	1 8:	30 U
	206-44-0	Fluoranthene		89	30)
Ì	129-00-0	Pyrene Butylbenzylpht			50 J
1	85-68-7	Butylbenzylpht	halate	183	30 U
1	91-94-1	3,3'-Dichlorob	enzidine	1 170	00 10 1
1	56-55-3	Benzo(a)Anthra	cene	1 734	10 1
1	117-81-7	bis(2-Ethylhex	vl)Phthalate	8:	30 U
1	218-01-9	Chrysene			10 J
1	117-84-0	Di-n-Octyl Pht	halate	1 83	30 U
ì	205-99-2	Benzo(b)Fluora	nthene	1 4:	10 11 1
1	207-08-9	Benzo(k)Fluora	nt hene	6:	[0 J]
1	50-32-8	Benzo(a)Pyrene		41	TO 1
1	193-39-5	Indeno(1, 2, 3-c	d)Pyrene	1	10 J
I	53-70-3	Dibenz(a,h)Ant	hracene	!83	
-	191-24-2	Benzo(g, h, i)Pe	rylene		10 11
١.					

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

EHQ42	
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Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ42B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ42B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.0

Number TICs found: 14

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	l Q
=======================================	= ===================================	=======	=======================================	====:
•	UNKNOWN	4.22	500	J
•	I UNKNOWN	4.82	1000	l J
	UNKNOWN	6.42	3000	J
$1\overline{0544}-50-0$	SULFUR	24.60	2000	J ·
. 10544-50-0	SULFUR	24.67	3000	J
	UNKNOWN	25.55	800	J
	UNKNOWN ALKANE	33.20	500	J
$2\overline{05-82}-3$	LINKIN BENZO[J] FLUORANTHENE	33.80	400	i J
•	(, 1) UNKNOWN	34.63	700	J
0	UNKNOWN ALKANE	35.38	1000	j
1.	1	36.85	400	J
2	UNKNOWN	38.05	400	J
3.	UNKNOWN	38.98	400	J
4.	UNKNOWN	39.38	500	i J

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ43B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ43B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 17 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

		CONCENTRA			•
CAS NO.	COMPOUND	(ug/L or	ug/Kg) U	IG/KG	Q
108-95-2	Dhonol	•	1	0.00	1
111-44-4	bis(2-Chloroe	- h - 1 \ F + h - v	<u> </u>	800 800	U U
05-57-9	2-Chlorophono	inyi)einer	¦	800	U
541-72-1	2-Chloropheno 1, 3-Dichlorob	1	 ¦	800	וט
100-40-7	1, 3-Dichlorob	enzene	 ¦	800	ן ט ן ט
100-40-1	1, 4-Dichlorob	enzene	¦		•
0550-1	Bénzyl Alcoho	l	¦	800	U
95-50-1	1, 2-Dichlorob	enzene	[800	U
30-48-7	2-Methylpheno bis(2-Chloroi		!	800	U
39638-32-9-	4-Methylpheno	sopropy1)Etnei	r—¦	800	U
106-44-5	4-Methylpheno N-Nitroso-Di-	. D	!·	800	Į Ū
621-64-1	N-NILFOSO-DI-	n~Propylamine	¦	800	U
61-12-1	He xachlor oet h	ane	 !	800	U
98-95-3	Nitrobenzene_		 !	800	ĮÜ
78-59-1	Isophorone		 !	800	l U
00 () 0	4 NILIODHENDI			800	U
105-67-9	2, 4-Dimethylp	nenol	 !	800	U
65-85-0	Benzoic Acid_ bis(2-Chloroe		!	3900	U
111-91-1	bis(2-Chloroe	thoxy)Methane_	!	800	U
120-83-2	2, 4-Dichlorop	henol	!	800	U
120-82-1	1, 2, 4-Trichlor	robenzene	!	800	ľ
91-20-3	Napht halene			800	l U
106-47-8	Naphthalene 4-Chloroanili	ne		800	U
87-68-3	Hexachlorobuta	adiene	1	800	ľ
59-50-7	4-Chloro-3-Met	thylphenol		800	ľ
91-57-6	2-Methylnapht	halene	!	800	ľ
77-47-4	Hexachlorocyc	lopentadiene_	!	800	ן ט
88-06-2	2, 4, 6-Trichlo	rophenol		800	ľŪ
95-95-4	2, 4, 5-Trichlo	ophenol		3900	U
91-58-7	2-Chloronaphtl	halene		800	ľ
88-74-4	2-Nitroanilin	9	1	3900	ľ
131-11-3	Dimethyl Phtha	alate	1	800	U
208-96-8	Acenaphthylen	<u> </u>	1	800	ΙŪ

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ43B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ43B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 17 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y Dilution Factor: 1.0 pH: 7.5

> CONCENTRATION UNITS: CAS NO COMPOUND (ug/L or ug/Kg) HG/KG Δ

	CAS NO.	COMPOUND	(ug/L or	ug/Kg)	UG/KG	Q
{				1		1 1
İ	99-09-2	3-Nitroaniline		i	3900	ו טו
1	83-32-9	Acenaphthene		i	800	U
1	51-28-5	Acenaphthene 2, 4-Dinitrophenol		!	3900	U
1	100-02-7	4-Nitrophenol			3900	ן טן
1	132-64-9	Dibenzofuran		ì	800	U
i	121-14-2	2, 4-Dinitrotoluen	е	1	800	U
1	606-20-2	2.6-Dinitrotoluen	e	l	800	U
1	84-66-2	Diethylphthalate_ 4-Chlorophenyl-ph			800	IU I
	7005-72-3	4-Chlorophenyl-ph	enylether_	1	800	U
1	86-73-7	Fluorene		1	800	ן טן
1	100-10-6	4-Nitroaniline			3900	Į U
1	534-52-1	4,6-Dinitro-2- <u>Met</u>	hylphenol_	!	3900	ן טן
1	86-30-6	N-Nitrosodiphenyl	amine (1)_		800	IU I
1	101-55-3	4-Bromophenyl-phe	nylether	1	800	U
ì	118-74-1	Hexachlorobenzene		1	800	ו עו
1	87-86-5	Pentachlorophenol		1	3900	IU I
1	85-01-8	Phenanthrene		1	990	211
1	120-12-7	Anthracene		1	190	<u> </u>
1	84-74-2	Di-n-But yl pht hala	t e	!	800	ן טן
l	206-44-0	Fluoranthene		1	1300	
1	129-00-0	Pyrene		I	790	
1	85-68-7	Butylbenzylphthal	ate	1	800	IU I
1	91-94-1	3,3'-Dichlorobenz	idine	I	1600	<u> </u>
ı	56-55-3	Benzo(a)Anthracen	e		490	11
1	117-81-7	bis(2-Ethylhexyl)	Phthalate_		230	
1	218-01-9	Chrysene		1	480	
	117-84-0	Di-n-Octyl Phthal	ate		800	U
l	205-99-2	Benzo(b)Fluoranth	ene	!	900	
İ	207-08-9	Benzo(k)Fluoranth	ene	!	800	<u> </u>
ļ	50-32-8	Benzo(a)Pyrene		<u> </u>	510	11
ļ	193-39-5	Indeno(1, 2, 3-cd)P	yrene	!	420	1]
1	53-70-3	Dibenz(a,h)Anthra	cene	!	800	14
l	191-24-2	Benzo(g, h, i)Peryl	ene	¦	1530	J
1.	4) 0			 '		-'

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ43

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ43B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID:

EHQ43B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 17 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y pH: 7.5

Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found: 9

CAS NUMBER	COMPOUND NAME	l RT	EST. CONC.	l i o	!
CAS NUMBER	CORPOUND NAME	•	ESI. CONC.	. 	!
======================================		- =======	========	=====	ı
11	UNKNOWN	4.25	l 600	J	1
12.	UNKNOWN	4.87	1000	J	Ì
13.	UNKNOWN	6.47	3000	l J	Ī
14.	UNKNOWN	23.95	400	l J	Ī
5. 1 0544- 50-0	SULFUR	24.62	2000	J	1
6. 10544-50-0	SULFUR	24.67	2000	J	ĺ
17.	UNKNOWN	36.88	400	J	ı
18.	UNKNOWN	37.75	500	J	1
19.	UNKNOWN	38.70	400	l J	1
1		1	I	i	1

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ44B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ44B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 19 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y pH: 7.4 Dilution Factor: 1.0

CONCENTRATION UNITS:

	CAC NO	COMPOUND	(no /L			^	
	CAS NO.	COMPOUND	(ug/L or	ug/kg)	UG/KG	Q	
1				ı		J 1	
i	108-95-2	-Phenol -bis (2-Chloroethyl -2-Chlorophenol -1, 3-Dichlorobenze -1, 4-Dichlorobenze		j	810	ับ เ	1
i	111-44-4	-bis(2-Chloroethyl)Ether	i	810	i U	[
1	95-57-8	-2-Chlorophenol			810	U	l
1	541-73-1	-1,3-Dichlorobenzei	ne		810	U	[
1	106-46-7	-1,4-Dichlorobenze	ne		810	U	l
ĺ	100-51-6	-Benzvi Alcohol		i	810	U	ļ
1	95-50-1	-1,2-Dichlorobenzei	ne		810	ן ט ן	ĺ
1	95-48-7	-2-Methylphenol -bis(2-Chloroisopr		i	810	1 U	
1	39638-32-9	-bis(2-Chloroisopro	opyl)Ether	r	810	U	l
1	106-44-5	-4-Methylphenol -N-Nitroso-Di-n-Pr		1	810	U	ļ
Į	621-64-7	-N-Nitroso-Di-n-Pr	pylamine		810	U	l
-					810	l U	ĺ
1	98-95-3	-Nitrobenzene			810	l U	l
	78-59-1	-Isophorone -2-Nitrophenol -2,4-Dimethylpheno			810	I U	(
-1	88-75-5	-2-Nitrophenol			810	l U	l
1	105-67-9	-2, 4-Dimethylpheno	l	i	810	ן טן	
1	65-85-0	-Benzolc Acid			4000	l U	l
ĺ	111-91-1	-bis(2-Chloroethox	y)Methane	I	810	I U	;
1	120-83-2	-2,4-Dichloropheno:	l .		810	l U	
1	120-82-1	-1, 2, 4-Trichlorobei	nzene	1	810	ן טן	
1	91-20-3	-Naphthalene		1	810	I U	ĺ
ı	106-47-8	-4-Chloroaniline			810	U	,
1	87-68-3	-Hexachlorobutadie -4-Chloro-3-Methyl -2-Methylnaphthale	ne	I	810	U	
1	59-50-7	-4-Chloro-3-Methyl	ohenol		810	IU I	
-	91-57-6	-2-Methylnaphthalei	ne		810	J U	ĺ
1	77-47-4	-Hexachlorocyclope:	ntadiene_		810	I U	;
	88-06-2	-2, 4, 6-Trichlorophe	enol	1	810	U	
1	95-95-4	-2, 4, 5-Trichloropho	enol	1	4000	I U	l
	91-58-7	-2-methylnaphthale -Hexachlorocyclope -2, 4, 6-Trichloroph -2, 4, 5-Trichloroph -2-Chloronaphthale	ne		810	U	ļ
1	88-74-4	-2-Nitroaniline -Dimethyl Phthalato -Acenaphthylene		1	4000	l U]
1	131-11-3	-Dimethyl Phthalato	9		-	U	İ
l	208-96-8	-Acenaphthylene			810	U	J
1,						l!	ı

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960

SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ44B

Sample wt/vol:

 $30.0 \quad (g/mL) G$

Lab File ID:

EHQ44B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 19

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y

pH:

dec.

7.4

Dilution Factor: 1.0

			CONCENTRA	ATION UNITS:		
	CAS NO.	COMPOUND	(ug/L or	ug/Kg) UG/KG	3	Q
			•			
I					ļ	l t
	99-09-2	3-Nitroaniline_				ו עו
1	83-32-9	Acenaphthene				U
- 1	51-28-5	2, 4-Dinitropher	101	40	000	[U .
	100-02-7	4-Nitrophenol_		40	000	T I
- 1	132-64-9	Dibenzofuran		1	310	ן ען
1	121-14-2	2, 4-Dinitrotolu	iene		310	ו עו
- 1	606-20-2	2,6-Dinitrotolu	lene	1	810	ן ען
1	84-66-2	Diethylphthalat	e	1	310	ן עו
- 1	7005-72-3-	4-Chlorophenyl-	phenylether_	1	310	U .
1	86-73-7	Fluorene		{	310	U
	100-10-6	4-Nitroaniline_		40	000	ן שן
1	534-52-1	4,6-Dinitro-2- <u>N</u>	lethylphenol	4(000	IU I
- 1	86-30-6	N-Nitrosodipher	ylamine (1)		310	[U]
-	101-55-3	4-Bromophenyl-p	henylether		310	ו טו
- 1	118-74-1	He xa chlor oben ze	ne]	310	U
1	87-86-5	Pentachloropher	ol	4	000	เบ เ
ĺ	85-01-8	Phenanthrene			200	i i
1	120-12-7	Anthracene		1		i v i
Ť	84-74-2	Di-n-But yl pht ha	late	 i		i u i
Ì	206-44-0	Fluoranthene		$\overline{}$	300	i i
i	129-00-0	Pyrene		—i 🗦		1 J 7
i	85-68-7	Butylbenzylphth	alate			Ü
i	91-94-1	3, 3'-Dichlor obe	enzidine			וֹטֹ ַ וֹ
i	56-55-3	Benzo(a)Anthrac	ene	\overline{f}	390	J7
i	117-81-7	bis(2-Ethylhexy	1)Phthalate	—;		i U
i	218-01-9	Chrysene	_,			IJ7
i	117-84-0	Di-n-Octyl Phth	alate	—;;		וֹט i
i	205-99-2	Benzo(b)Fluorar	thene		20	i i
i	207-08-9	Benzo(k)Fluorar	thene			เบ เ
i	50-32-8	Benzo(a)Pyrene				J 7
i		Indeno(1, 2, 3-cd)Pyrene			j j
i	53-70-3	Dibenz(a, h)Anth	racene	—;	310	i i
i	191-24-2	Benzo(g, h, i)Per	ylene	i		J
i	-			—-i		<u>ا</u> '
(1) - Cannot	be separated from Di	phenylamine			· ·
		-	-			

1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ44

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT

Case No.: 14960 SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID:

EHQ44B

Sample wt/vol:

30.0 (g/mL) G

Lab File ID:

EHQ44B

Level: (low/med) LOW

Date Received:

09/26/90

% Moisture: not dec. 19 dec.

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc)

SONC

Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y

7.4 pH:

Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found:

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	 Q ====	 -
1.	UNKNOWN UNKNOWN UNKNOWN TRICHLORO-1,1'-BIPHENYL ISOM SULFUR UNKNOWN UNKNOWN UNKNOWN	4.25 4.85 6.45 22.62 24.60 24.67 34.68 36.88 37.63	300 1000 2000 400 1000 2000 400 400 700	J J J J J	

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ45B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ45B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 31 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/	Kg) UG/KG	Q
108-95-2	·Phenol	960	 U
111-44-4	Phenoibis (2-Chloroethyl)Ether 2-Chlorophenol1, 3-Dichlorobenzene 1, 4-Dichlorobenzene Benzyl Alcohol1, 2-Dichlorobenzene 2-Methylphenol bis (2-Chloroisopropyl)Ether	960	ίŬ
95-57-8	2-Chlorophenol	960	ับ
541-73-1	1.3-Dichlorobenzene	960	Ü
106-46-7	1. 4-Dichlorobenzene	960	Ü
100-51-6	Benzyl Alcohol	960	Ü
95-50-1	1, 2-Dichlor obenzene	960	Ü
95-48-7	2-Methylphenol	960	i ซี
39638-32-9	bis(2-Chloroisopropyl)Ether	960	Ü
106-44-5	4-Methylphenol	960	i ซ
621-64-7	4-Methylphenol N-Nitroso-Di-n-Propylamine	960	Ü
67-72-1	Hexachloroethane	960	Ü
98-95-3	Nitrobenzene	960	U
78-59-1	Isophorone	960	Ü
88-75-5	N-Nitroso-Di-n-Propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol Benzoic Acid bis(2-Chloroethoxy)Methane 2, 4-Dichlorophenol 1, 2, 4-Trichlorobenzene	960	įυ
105-67-9	2, 4-Dimethylphenol	960	Ü
65-85-0	Benzoic Acid	4600	Ū
111-91-1	bis(2-Chloroethoxy)Methane	960	Ū
120-83-2	2, 4-Dichlorophenol	960	Ü
120-82-1	1, 2, 4-Trichlorobenzene	960	įυ
91-20-3	Naphthalene	960	Ü
106-47-8	4-Chloroaniline	960	ับ
87-68-3	Hexachlorobutadiene	960	ับ
59-50-7	Naphthalene	960	Ü
91-57-6	2-Methylnaphthalene	960	iŭ
77-47-4	Hexachlorocyclopentadiene	960	Ü
88-06-2	2, 4, 6-Trichlorophenol	960	Ü
95-95-4	2, 4, 5-Trichlorophenol	4600	-
91-58-7	2-Chloronaphthalene	960	Ü
88-74-4	Hexachlorocyclopentadiene2, 4, 6-Trichlorophenol2, 4, 5-Trichlorophenol2-Chloronaphthalene2-NitroanilineDimethyl Phthalate	4600	ប
131-11-3	Dimethyl Phthalate	960	เบ
208-96-8	Acenaphthylene	960	Ū

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ45B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ45B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 31 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 99-09-2----3-Nitroaniline____ 4600 ΙŪ | 83-32-9----Acenaphthene 960 1 U 51-28-5----2, 4-Dinitrophenol 4600 I U 100-02-7----4-Nitrophenol 4600 1 U | 132-64-9-----Dibenzofuran__ 960 1 U 121-14-2----2, 4-Dinitrotoluene_ 960 IU 606-20-2----2,6-Dinitrotoluene____ 960 U 84-66-2----Diethylphthalate 960 1 U 7005-72-3----4-Chlorophenyl-phenylether 960 IU 1 86-73-7-----Fluorene 960 l U | 100-10-6-----4-Nitroaniline 4600 U 534-52-1----4, 6-Dinitro-2-Methylphenol 4600 IU 86-30-6---N-Nitrosodiphenylamine (1) 960 | U 101-55-3----4-Bromophenyl-phenylether 960 1 U 118-74-1-----Hexachlorobenzene 960 ΙU 87-86-5----Pentachlorophenol 4600 ΙU 85-01-8-----Phenanthrene 2500 1 120-12-7-----Anthracene 490 84-74-2----Di-n-Butylphthalate____ 960 206-44-0-----Fluoranthene 4000 | 129-00-0-----Pyrene_ 2100 | 85-68-7----Butylbenzylphthalate ľ 960 91-94-1----3, 3'-Dichlorobenzidine____ 1900 l U 56-55-3----Benzo(a)Anthracene 1200 117-81-7----bis(2-Ethylhexyl)Phthalate_ 240 | 218-01-9-----Chrysene_ 1000 | 117-84-0-----Di-n-Octyl Phthalate 960 1 U 205-99-2----Benzo(b)Fluoranthene 2400 207-08-9-----Benzo(k)Fluoranthene_ Į U 960 50-32-8-----Benzo(a)Pyrene_ 1200 193-39-5----Indeno(1,2,3-cd)Pyrene_ 1100 53-70-3-----Dibenz(a,h)Anthracene 230 |J|| 191-24-2----Benzo(g, h, i)Perylene_ 1300 (1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

EHQ45

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ45B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ45B

Level: (low/med) LOW Date Received: 09/28/90

% Moisture: not dec. 31 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/90

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found: 20

1		1	1	ı	ı
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	ĺ
=======		= =======	=======================================	=====	ı
1	UNKNOWN	4.88	3000	J	ı
12.	UNKNOWN	6.45	2000	J	t
13	UNKNOWN	23.98	3000	J	1
14	UNKNOWN	24.03	3000	J	1
15. 10544-50-0	SULFUR	24.70	6000	J	1
16. 10544-50-0	SULFUR	24.77	5000	J	ì
17.	UNKNOWN	25.93	800	J	i
18.	UNKNOWN	26.37	1000	J	i
19.	UNKNOWN PNA	27.12	500	J	i
110.	UNKNOWN PNA	27.37	500	J	i
111.	UNKNOWN ALKANE	33.25	700		ï
$112. \ \overline{205-8}2-3$	BENZO[J] FLUORANTHENE	34.70	1000	, <i>U</i>	1
•	— -	•	₹		ļ
113	UNKNOWN ALKANE	35.43	1000	J	ļ
114.	UNKNOWN	36.47	900	J	I
15	UNKNOWN	36.90	1000	J	ı
16	UNKNOWN ALKANE	37.45	1000	J	1
117	UNKNOWN	37.77	900	J	1
118.	UNKNOWN	38.87	900	J	1
119.	 UNKNOWN ALKANE 	39.37	800	J	ĺ
120.	UNKNOWN	39.60	700	J	į
11		_1:	l	l	1

EPA SAMPLE NO.

EHQ46

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ46B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ46B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 37 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 7.4 Dilution Factor: 1.0

CONCENTRATION UNITS:

	CAS NO.	COMPOUND	(ug/L or	ug/Kg)	UG/KG	Q	
ı				i		1	i
	108-95-2	-Phenol		i	1000	U	İ
- 1	111-44-4	-bis (2-Chloroethy	1)Ether	<u> </u>	1000	U	Ĺ
-	95-57-8	-2-Chlorophenol	•	1	1000	U	Ì
1	541-73-1	-1, 3-Dichlorobenz -1, 4-Dichlorobenz	ene	<u> </u>	1000	U	1
-	106-46-7	-1,4-Dichlorobenz	ene		1000	U	
- 1	100-51-6	-Benzyl Alcohol		<u></u>	1000	l U	1
	95-50-1	-1,2-Dichlorobenz	ene		1000	U	1
- 1	95-48-7	-2-Methylphenol		1	1000	U	
	39638-32-9	-2-Methylphenol_ -bis(2-Chloroisop	ropyl)Ether	·I	1000	U	1
- 1	106-44-5	-4-Methylphenol		1	1000	l U	1
l	621-64-7	-4-Methylphenol_ -N-Nitroso-Di-n-P	ropylamine_	{	1000	U	П
- 1	67-72-1	-Hexachloroethane		1	1000	U	1
,	98-95-3	-Nitrobenzene		1	1000	U	1
I	78-59-1	~Isophorone		ı	1000	U	
- 1	88-75-5	-2-Nitrophenol		{		U	
- 1	105-67-9	-2, 4-Dimethylphen	ol	1	1000	U	1
l	65-85-0	-Benzoic Acid		I	5100	U	1
1	111-91-1	-bis(2-Chloroetho	xy)Methane_	1	1000	U	1
ı	120-83-2	-2, 4-Dichlorophen	ol	1	1000	U	1
l	120-82-1	-1.2.4-Trichlorob	enzene	ļ	1000	U	1
ļ	91-20-3	-Naphthalene	·····	I	1000	ľ	1
	106-47-8	-4-Chloroaniline		1	1000	U	l
ı	87-68-3	-Hexachlorobutadi	ene	1	1000	ľ	1
I	59-50-7	-4-Chloro-3-Methy	lphenol	1		U	1
١	91-57-6	-2-Methylnaphthal	ene			ľ	1
j	77-47-4	-He xachlor ocyclop	entadlene	1		U	ì
ŀ	88-06-2	-2, 4, 6-Trichlorop	henol	!	1000	U	1
į	95-95-4	-2, 4, 5-Trichlorop -2-Chloronaphthal	henol	!		וּט	1
	91-58-7	-2-Chloronaphthal	ene	!	1000	Į U	l
ا	88-74-4	-2-Nitroaniline -Dimethyl Phthala	 	!	5100	IU	ĺ
1	131-11-3	-Dimethyl Phthala	t e	!	1000	U	1
ļ	208-96-8	-Acenaphthylene		!	1000	ĮŪ	ļ
						. I	1

SDG No.: EHQ42

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Case No.: 14960

Lab Code: ENCOT

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Matrix: (soil/water) SOIL Lab Sample ID: EHQ46B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ46B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 37 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 7.4 Dilution Factor: 1.0

CONFOUND CONCENTRATION UNITS:

SAS No.:

CAS NO.	COMPOUND	(ug/L or	ug/Kg)	UG/KG	Q
1			1		
99-09-2	3-Nitroaniline	9	ĺ	5100	i U
83-32-9	Acenapht hene 2, 4-Dinitrophe		i	1000	iu i
51-28-5	2, 4-Dinitrophe	enol	1	5100	i U
1 100-02-7	4-Nitrophenol	•	1	5100	ו עו
132-64-9	Dibenzofuran 2, 4-Dinitrotol		— i	1000	I U
121-14-2	2, 4-Dinitrotol	luene	i	1000	U
1 606-20-2	2.6-Dinitrotol	luene	ì	1000	U
84-66-2	Diethylphthala 4-Chlorophenyl	ite		1000	IU I
7005-72-3	4-Chlorophenyl	-phenylether	<u> </u>	1000	U
86-73-7	Fluorene		{	1000	ו ט
100-10-6	4-Nitroaniline	9	- 1	5100	U
534-52-1	4,6-Dinitro-2-	Methylphenol		5100	ĮŪ į
86-30-6	N-Nitrosodiphe	enylamine (1)	1	1000	IU I
101-55-3	4-Bromophenyl-	-phenylether	_ 1	1000	ו טו
118-74-1	Hexachlorobenz	zene	ł	1000	IU I
87-86-5	·Pentachlorophe	enol	}	5100	14
85-01-8	Phenanthrene		ŀ	750	[J]
120-12-7	Anthracene			1000	10
84-74-2	·Di-n-But ylpht b	nalate	1	1000	U
206-44-0	Fluoranthene		l	1400)i i
129-00-0	Pyrene Butylbenzylpht		₁	780	13 (
85-68-7	Butylbenzylpht	halate	<u> </u>	1000	IU I
91-94-1	3,3'-Dichlorob	penzidine	l	2100	U _
56-55-3	Benzo(a)Anthra	cene	1	360	117 1
1 117-81-7	bis(2-Ethylhex	(vl)Phthalate	1	240	J
218-01-9	Chrysene		<u> </u>	690	J_J
117-84-0	Chrysene Di-n-Octyl Pht	halate	I	,1000	
205-99-2	Benzo(b)Fluora	nthene	i	71000	[]
207-08-9	·Benzo(k)Fluora	ınthene	1	1000	<u> </u>
50-32-8	Benzo(a)Pyrene	•	1	520	13 1
193-39-5	Indeno(1,2,3-c	d)Pyrene	Į	460	<u> </u>]
53-70-3	Dibenz(a, h)Ant	hracene		1000	147 1
191-24-2	Benzo(g, h, i)Pe	erylene	1	530	<u> </u>
			_		_11

1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ46

Lab Name: ENCOTEC-AA

Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.:

SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ46B

Sample wt/vol:

 $30.0 \quad (g/mL) G$

dec.

Lab File ID:

EHQ46B

Level: (low/med) LOW

Date Received: 09/26/90

% Moisture: not dec. 37

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc)

SONC

Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y

pH: 7.4 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found: 7

CAS NUMBER	COMPOUND NAME	 R T	 Est. Conc.	l I Q	1
======================================		=======	=======================================	=====	: 1
11	UNKNOWN	4.92	4000	J	1
12.	UNKNOWN	6.47	3000	J	Ì
13.	UNKNOWN	24.68	4000	j	i
4. 10544-50-0	SULFUR	24.73	5000	J	i
15.	UNKNOWN	34.70	400	j	i
16.	UNKNOWN	36.93	700	J	i
17.	UNKNOWN	37.78	900	j	i
		1	, - J J	i	i

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ47B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ47B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 18 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

CONCENTRATION UNITS:

		CONCENTRA	AIION ONI	ı.	
CAS NO.	COMPOUND	(ug/L or	ug/Kg) U	G/KG	Q
108-95-2	Dhomol		1	0.00	!
111-44-4	Phenol bis(2-Chloroet	herl \Fthan	¦	800	Į U
111-44-4	DIS (Z-CHIOFOEL	nyl)Ether	 ¦	800	ן <mark>ט</mark>
541-72-4	2-Chlorophenol		<u></u>	800	ľŪ
100 40 7	1, 3-Dichlorobe	nzene	 -¦	800	Į Ū
106-46-7	1, 4-Dichlorobe	nzene	<u> </u>	800	וטו
100-51-6	Benzyl Alcohol		!	800	U
95-50-1	1,2-Dichlorobe	nzene	!	800	l U
95-48-7	2-Methylphenol bis(2-Chlorois		<u></u> !	800	I U
39638-32-9	bis (2-Chlorois	opropyl)Ethei	r	800	l U
106-44-5	4-Methylphenol		!	800	ľŪ
621-64-7	N-Nitroso-Di-n	-Propylamine		800	U
67-72-1	Hexachloroetha	ne		800	U
98-95-3	Nitrobenzene		ł	800	U
78-59-1	Isophorone			800	l U
88-75-5	Isophorone		1	800	U
103-01-3	2, 4-Dimethyiph	enoi	1	800	ľ
65-85-0	Benzoic Acid		ŀ	3900	U
111-91-1	bis(2-Chloroet	hoxy)Methane	i	800	iv
120-83-2	2, 4-Dichloroph	enol		800	Ü
120-82-1	1, 2, 4-Trichlor	obenzene	 i	800	iŪ
91-20-3	Naphthalene		i	1800	Σi
106-47-8	4-Chloroanilin	е	i	800	ĺŪ
87-68-3	Hexachlorobuta	dlene	i	800	iŪ
59-50-7	4-Chloro-3-Met	hylphenol	 '	800	ίŬ
91-57-6	2-Methylnaphth	alene	 ¦	3300	-
77-47-4	Hexachlorocycl	opentadiene	—— <u>;</u>	800	ี้เบ
88-06-2	2, 4, 6-Trichlor	ophenol	 ;	800	บั
95-95-4	2, 4, 5-Trichlor	ophenol	¦	3900	Ü
91-58-7	2-Chloronaphth	alene	¦	800	บั
88-74-4	2-Nitroaniline		 ;	3900	Ü
131-11-3	Dimethyl Phtha	late	 ;	800	Ŭ
	Acenaphthylene		!		
208-96-8	Acenaphthylene		4	800	ľŪ

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ47B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ47B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 18 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

	CAS NO.	COMPOUND	CONCENTRA (ug/L or			Q
1				1		1 1
- {	99-09-2	-3-Nitroaniline			3900	IU I
-	83-32-9			I		ן ט
1	51-28-5	2,4-Dinitrophenol				IU I
ı	100-02-7	4-Nitrophenol		l	3900	<u>IU</u> I
	132-64-9	Dibenzofuran	 	!	620	
- [121-14-2	-2, 4-Dinitrotoluene	·	I	800	ו "עד
-	606-20-2	-2,6-Dinitrotoluene	·	I	800	ן ט ן
- [84-66-2	Diethylphthalate_		1	800	ן ט
- 1	7005-72-3	-4-Chlorophenyl-phe	enylether.	1	800	U
l	86-73-7	-Fluorene				ן ען
-	100-10-6	-4-Nitroaniline				Į U
l	534-52-1	4,6-Dinitro-2-Meth	nylphenol			U
	86-30-6	-N-Nitrosodiphenyla	unine (1)	I	800	IU I
l	101-55-3	·4-Bromophenyl-pher	ylether_	1		U
1	118-74-1	He xa chlor obenzene_	· · · · · · · · · · · · · · · · · · ·	I		IU I
1	87-86-5	Pentachlorophenol_		i	3900	ן טן
-	85-01-8	-Phenanthrene		I	$\overline{1300}$	1
1	120-12-7	·Anthracene		1	800	ו ט
	84-74-2	Di-n-But yl pht halat	: e	I	100	111
!	206-44-0	·Fluoranthene		1	(900)	
1	129-00-0	Pyrene		i	380	JJ
-	85-68-7	Butylbenzylphthala	ite	1	800	ĪŪ I
1	91-94-1	-3.3'-Dichlorobenzi	dine	1	1600	10 1
1	56-55-3	·Benzo(a)Anthracene	:		430	11
1	117-81-7	bis(2-Ethylhexyl)	hthalate_	1	800	1117
1	218-01-9	Chrysene		1	420	ا أ
1	117-84-0	Di-n-Octyl Phthala	ite	I	800	10 1
1	205-99-2	Benzo(b)Fluoranthe	ne	1	(900)	1 1
	207-08-9	Benzo(k)Fluoranthe	ne	I	,800	<u> </u>
1	50-32-8	Benzo(a)Pyrene		I	1	11
1	193-39-5	·Indeno(1, 2, 3-cd)Ps	rene	1	290	11
ļ	53-70-3	·Dibenz(a, h)Anthrac	ene	!	800	
1	191-24-2	Benzo(g,h,i)Peryle	ne		440	13
1_						11
(1	l) - Cannot be se	parated from Diphe	enylamine			

1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ47	

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ47B

30.0 (g/mL) G Sample wt/vol: Lab File ID: EHQ47B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. <u>18</u> dec. <u>—</u> Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

CONCENTRATION UNITS:

Number TICs found: 20 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT į	EST. CONC.	Q
	UNKNOWN	4.98	3000	 J
2.	UNKNOWN	6.48	2000	j
3.	UNKNOWN ALKYL BENZENE	11.47	500	J
1. 90-12-0	1-METHYL NAPHTHALENE	13.63	2000	J
5	DIMETHYL NAPHTHALENE ISOMER	15.38	1000	J
3	DIMETHYL NAPHTHALENE ISOMER	15.65	3000	J
·	DIMETHYL NAPHTHALENE ISOMER	15.98	1000	J
	TRIMETHYL NAPHTHALENE ISOMER	17.10	600	J
	TRIMETHYL NAPHTHALENE ISOMER!	17.47	600	l J
0	TRIMETHYL NAPHTHALENE ISOMER	17.80	600	J
1	TRIMETHYL NAPHTHALENE ISOMER	18.05	800	J
2	TRIMETHYL NAPHTHALENE ISOMER	18.43	1000	J
3	UNKNOWN	19.17	2000	J
4.	UNKNOWN	20.33	2000	J
5	UNKNOWN ALKANE	20.67	1000	J
$6.1\overline{0544-50-0}$	SULFUR	24.72	3000	J
7.	I - UNKNOWN	36.93	2000	J
8	UNKNOWN	37.45	1000	l J
9	UNKNOWN	37.78	2000	J
0	UNKNOWN	38.90	600	J

EPA SAMPLE NO.

EHQ48

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ48B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ48B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 6 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CONCENTRATION UNITS:

AS NO. COMPOUND (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	(ug/L or	ug/Kg)	UG/KG	Q	
1			ł		1	ı
108-95-2			j	700	iU	i
111-44-4	bis(2-Chloroet	hyl)Ether	 i	700	U	i
95-57-8	2-Chlorophenol	<u> </u>	1	700	ίŪ	i
541-73-1	1, 3-Dichlorobe	nzene	i	700	Ü	ĺ
106-46-7	1, 4-Dichlorobe	enzene	i	700	U	Ì
100-51-6	Benzyl Alcohol		1	700	l U	1
95-50-1	1,2-Dichlorobe	enzene	1	700	l U	- 1
95-48-7	2-Methylphenol		1	700	l U	1
39638-32-9	bis (2-Chlorois	opropyl)Ether	r I	700	U	1
106-44-5	4-Methylphenol		1	700	ľŪ	1
621-64-7	N-Nitroso-Di-r	-Propylamine	1	700	U	- 1
67-72-1	He xa chlor oet ha	ne	{	700	l U	1
1 98-95-3	Nitrobenzene		1	700	U	1
78-59-1	Isophorone		1	700	U	- 1
88-75-5	2-Nitrophenol_		1	700	U	1
105-67-9	Isophorone 2-Nitrophenol 2, 4-Dimethylph	ienol		700	Į Ū	-
65-85-0	Benzoic Acid_ bis(2-Chloroet		1	3400	ľ	I
111-91-1	bis(2-Chloroet	hoxy)Methane	!	700	U	1
120-83-2	2, 4-Dichloroph	ienol	I	700	l U	
120-82-1	1, 2, 4-Trichlor	obenzene	1	700	ΙŪ	1
91-20-3	Naphthalene		1	(1200)	1	
106-47-8	4-Chloroanilir	re	1	700	U	1
87-68-3	He xa chlor obut a	diene	1	700	Į U	
59-50-7	4-Chloro-3-Met	hylphenol	!	700	ΙŪ	ł
91-57-6	2-Methylnaphtl	nalene		(810)	1	1
77-47-4	He xachlor ocycl	opentadiene_	!	700	l U	- 1
88-06-2	2, 4, 6-Trichlor	ophenol		700	U	1
95-95-4	2, 4, 5-Trichlor	ophenol	!	3400	ľ	1
91-58-7	2-Chloronaphtl	na l en e	!	700	U	- 1
88-74-4	2-Nitroaniline	7	!	3400	ו ט	!
131-11-3	Dimethyl Phtha	late	!	700	<u> U</u>	Ţ
208-96-8	Acenapht hylene		!	280	11	
l			I		. l	—١

EHQ48

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ48B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ48B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 6 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

	CAS NO	COMPOUND	(ug/L or	ng/vg)	UG/ KG	Q
1				1	1	
į	99-09-2	3-Nitroaniline		•	3400	บ
i	83-32-9	Acenaphthene_		i	(770)	
Ì	51-28-5	2,4-Dinitrophe	nol	i	3400	U
1	100-02-7	4-Nitrophenol			3400	U
1	132-64-9	Dibenzofuran		1	(1000)	
1	121-14-2	2, 4-Dinitrot ol	uene	1	700	U I
1	606-20-2	2, 6-Dinitrotol	uene	_1	700	U
1	84-66-2	Diethylphthala	t e		700	U
1	7005-72-3	4-Chlorophenyl	-phenylether_	1		U
1	86-73-7	Fluorene			(900)	
1	100-10-6	4-Nitroaniline		1	3400	U
	534-52-1	4,6-Dinitro-2-	Methylphenol_	1	3400	U
1	86-30-6	N-Nitrosodiphe	nylamine (1)_	1		ן טו
	101-55-3	4-Bromophenyl-	phenylether	l	•	U
1	118-74-1	Hexachlorobenz	ene	1	700	I U
	87-86-5	Pentachiorophe	nol			U
	85-01-8	Phenant hrene		1	11000	l
ļ	120-12-7	Anthracene			1300	
1	84-74-2	Di-n-But ylphth	alate	1	•	ן טן
1	206-44-0	Fluoranthene_		!		E !
1	129-00-0	Pyrene		{	(5800)	
1	85-68-7	Butylbenzylpht	halate	1	•	U
1	91-94-1	3,3'-Dichlor ob	enzidine	I		ן ט
1	56-55-3	Benzo(a)Anthra	cene	1	3300	
1	117-81-7	bis(2-Ethylhex	yl)Phthalate_	<u></u>		J
1	218-01-9	Chrysene	 	!	2700	
1	117-84-0	Di-n-Oct yl Pht	halate	!		U
1	205-99-2	Benzo(b)Fluora	nthene	!	6000	}
!	207-08-9	Benzo(k)Fluora	nthene	<u></u> !		ָוֹ ע
ļ	50-32-8	Benzo(a)Pyrene	1\D	!	2800	
!	193-39-5	Indeno(1, 2, 3-c	a)Pyrene	<u>!</u>	2600	
ļ	53-70-3	Dibenz(a, h)Ant	nracene	!	730	<u> </u>
1	191-24-2	Benzo(g, h, i)Pe	rytene	!	2800	<i>i</i>
1_		 				

EPA SAMPLE NO.

1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ48B

Sample $\sqrt[6]{t}/\text{vol}$: 30.0 (g/aL) GLab File ID: EHQ48B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. ____6 dec. ____ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>

Number TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.28	700	J
<u> </u>	UNKNOWN	4.90	1000	J
3.	UNKNOWN	6.47	1000	J
4. $9\overline{0-12-0}$	1-METHYL NAPHTHALENE	13.63	500	J
5	DIMETHYL NAPHTHALENE ISOMER	15.63	400	J
6. 2788-23-0	9-NITROSO 9H-CARBAZOLE	22.17	1000	J
7	UNKNOWN PNA	22.92	500) J
3.	UNKNOWN	23.20	500	J
9	UNKNOWN	24.00	700	J
10.	UNKNOWN	25.98	1000	J
11.	UNKNOWN	27.12	400	l J
12.	UNKNOWN	29.00	500	J
13.	UNKNOWN	29.43	800	J
14. 82-05-3	7H-BENZ[DE]ANTHRACEN-7-ONE	29.75	600	J
15	I WOUN UNKNOWN	30.55	600	i J
$16. \ \ 205-82-3$	BENZO[J] FLUORANTHENE &	34.78	2000	J
17	PAN 1/2/2 UNKNOWN	35.17	2000	J
18.	10 991 UNKNOWN ALKANE I	35.43	2000	J
19.	UNKNOWN ALKANE	37.45	2000	J
20.	UNKNOWN	39.87	2000	J

EPA SAMPLE NO.

EHQ48DL

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ48BDL

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ48BDL

Level: (low/saed) LOW Date Received: 09/26/90

% Moisture: not dec. 6 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 2.0

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or			9
		(- G /		.,	. 7
108-95-2	Phenol_ bis(2-Chloroet		¦	1400	I U
111-44-4	·bis(2-Chloroet	thyl)Ether	1	1400	U
95-57-8	2-Chloropheno:	l		1400	U
541-73-1	1, 3-Dichlorob	enzene	!	1400	ľ
106-46-7	1, 4-Dichlorobe	enzene		1400	Į U
100-51-6	Benzyl Alcoho	<u> </u>	I	1400	ľ
95-50-1	1, 2-Dichlorobe	enzene	1	1400	U
95-48-7	·2-Methylpheno:	L	{ <u></u> }}	1400	U
39638 - 32 - 9	1, 3-Dichlorobe 1, 4-Dichlorobe Benzyl Alcohol 1, 2-Dichlorobe 2-Methylphenol	opropyl)Ether	1	1400	Į U
106-44-5	4-Methylpheno:	<u> </u>	<u> </u>	1400	ΙŪ
621-64-7	N-Nitroso-Di-	n-Propylamine_	<u> </u>	1400	U
67-72-1	He xachlor oet ha	ne	<u> </u>	1400	U
98-95-3	Nitrobenzene_		<u> </u>	1400	ΙŪ
78-59-1	Isophorone		<u> </u>	1400	ľŪ
88-75-5 -	bis (2-Chiorols4-MethylphenolN-Nitroso-DiHexachloroethsIsophoroneIsophorone2-Nitrophenol2, 4-Dimethylphe		<u> </u>	1400	U
105-67-9	2, 4-Dimethylpi	nenol	<u> </u>	1400	ľ
00 00 0	Done or more			6800	U
111-91-1	bis(2-Chloroet	hoxy)Methane	i	1400	U
120-83-2	2, 4-Dichloropl	henol		1400	U
120-82-1	1, 2, 4-Trichlor	obenzene	i	1400	Ü
91-20-3	Naphthalene		1	1100	DJ
				1400	Ü
87-68-3	He xachlor obuta	adlene	i	1400	U
59-50-7	4-Chloro-3-Me	hylphenol	i	1400	Ü
91-57-6	2-Methylnapht	halene	i	740	DJ
77-47-4	He xachlor ocyc	lopentadiene	i	1400	เบ
88-06-2	2, 4, 6-Trichlo	ophenol	i	1400	įυ
95-95-4	2, 4, 5-Trichlor	ophenol	i	6800	Ü
91-58-7	2-Chloronaphtl	nalene	i	1400	U
88-74-4	4-ChloroanilingHexachlorobuts4-Chloro-3-Methoro-3-Methoro-3-Methoro-2-Methorocycle2, 4, 6-Trichlor2-Chloronaphtle2-Nitroaniling	•		6800	Ü
131-11-3	Dimethyl Phtha	late	<u> </u>	1400	U
					DJ

EHQ48DL

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ48BDL

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ48BDL

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 6 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 2.0

a.a	GOMBONIO	CONCENTRA			_
CAS NO.	COMPOUND	(ug/L or	ug/Kg)	UG/KG	Q
_			1		1
99-09-2	3-Nitroaniline	P	[6800	U
83-32-9	Acenapht hene_		I	730	DJ
51-28-5	2, 4-Dinitrophe	enol		6800	U
100-02-7	4-Nitrophenol		1	6800	ľŪ
132-64-9	Dibenzofuran		1		DJ
121-14-2	2, 4-Dinitroto:	luene	1	1400	l U
606-20-2	2,6-Dinitroto	luene	- 1	1400	l U
84-66-2	Diethylphthala	ate	1	1400	l U
7005-72-3	4-Chloropheny	l-phenylether	1	1400	ĮŪ
86-73-7	Fluorene		1	860	DJ
100-10-6	4-Nitroaniline	2	1	6800	ľŪ
534-52-1	4, 6-Dinitro-2 N-Nitrosodipho	-Methylphenol_	1	6800	U
86-30-6	N-Nitrosodiph	enylamine (1)	<u> </u> †	1400	U
101-55-3	4-Bromophenvl·	-phenvlether	1	1400	l U
118-74-1	Hexachloroben:	zene	1	1400	U
87-86-5	Pentachlorophe	enol	3	6800	Ü
85-01-8	Phenanthrene		I	9800	D
120-12-7	Anthracene		1	1900	l D
84-74-2	Di-n-But ylpht]	halate	ł	1400_	IU_
206-44-0	Fluoranthene		İ	13000	10
129-00-0	Pvrene		1	6900	I D
85-68-7	Butylbenzylph(thalate	1	1400	Ü
91-94-1	3.3'-Dichloro	benzidine	1	2800	เบ
56-55-3	Benzo(a)Anthra bis(2-Ethylhe	cene		4800	į D
117-81-7	bis(2-Ethylhe	xyl)Phthalate	i	360	DJ
218-01-9	Chrysene Di-n-Octyl Ph	v ,	 i	3100	D
117-84-0	Di-n-Oct vl Ph	halate	 i	1400	เบิ
205-99-2	Benzo(b)Fluora	ant hene	—- <u>i</u>	5600	D
207-08-9	Benzo(k)Fluora	anthene	1	1400	Ū
50-32-8	Benzo(a)Pyrenc	€	1	3300	D
193-39-5	Indeno(1, 2, 3-	cd)Pyrene	i	3200	i D
53-70-3	Dibenz(a, h)An	hracene	i	1300	DJ
404 04 0	Benzo(g, h, i)Po		 ;	3000	I D

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ48DL

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ48BDL

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ48BDL

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. ____6 dec. ____ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 2.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found: 14

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=======================================		= ======		====
·	UNKNOWN	4.85	700	l J
·	UNKNOWN PNA	22.97	600	J
,	UNKNOWN	23.18	700	J
	UNKNOWN	23.98	1000	J
. 	UNKNOWN	25.97	1000	J
	I UNKNOWN	1 28.98	900	i J
	UNKNOWN	29.42	1000	ij
	UNKNOWN	34.15	1000	J
	UNKNOWN	34.55	1000	j
205-82-3	BENZO[J] FLUORANTHENE	34.65	3000	J
1.	UNKNOWN ALKANE	35.32	900	J
	I UNKNOWN ALKANE	37.40	800	J
3.	UNKNOWN	37.88	800	J
	UNKNOWN	38.48	700	į

EHQ49

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ49B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ49B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 9 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 8.8 Dilution Factor: 1.0

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 108-95-2----Phenol 730 U 111-44-4-----bis(2-Chloroethyl)Ether 730 IU 95-57-8----2-Chlorophenol 730 IU 541-73-1----1, 3-Dichlorobenzene_____| 730 I U | 106-46-7----1, 4-Dichlorobenzene 730 I U | 100-51-6-----Benzyl Alcohol_ 730 | U 95-50-1----1, 2-Dichlorobenzene 730 1 U | 95-48-7----2-Methylphenol l U 730 39638-32-9----bis(2-Chloroisopropyl)Ether ľ 730 | 106-44-5----4-Methylphenol 730 IU 621-64-7----N-Nitroso-Di-n-Propylamine 730 IU 67-72-1-----Hexachloroethane 730 IU | 98-95-3-----Nitrobenzene 730 ΙŪ | 78-59-1-----Isophorone 730 U | 88-75-5----2-Nitrophenol 730 IU 105-67-9----2, 4-Dimethylphenol 730 I U | 65-85-0-----Benzoic Acid 1 U 3500 111-91-1-----bis(2-Chloroethoxy)Methane I U 730 120-83-2----2, 4-Dichlorophenol 730 U 120-82-1----1, 2, 4-Trichlorobenzene____ 730 I U | 91-20-3-----Naphthalene 340 106-47-8-----4-Chloroaniline 730 | U | 87-68-3-----Hexachlorobutadiene 730 I U | 59-50-7-----4-Chloro-3-Methylphenol__ 730 IU 1 91-57-6----2-Methylnaphthalene 540 J 1 77-47-4-----Hexachlorocyclopentadiene 730 I U | 88-06-2----2, 4, 6-Trichlorophenol_ 730 ΙŪ 95-95-4----2, 4, 5-Trichlorophenol____ 3500 U 91-58-7----2-Chloronaphthalene IU 730 | 88-74-4----2-Nitroaniline 3500 IU 131-11-3----Dimethyl Phthalate 730 l U 208-96-8-----Acenaphthylene 730

EHQ49

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Case No.: 14960

Lab Code: ENCOT

SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ49B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ49B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 9 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 8.8 Dilution Factor: 1.0

			CONCENTRA				
	CAS NO.	COMPOUND	(ug/L or	ug/Kg)	UG/KG	Q	
	00 00 0	0.3714		ļ.	0.5.0.0		1
!	99-09-2	3-Nitroaniline		<u>!</u>	3500	U	!
!	83-32-9	Acenaphthene		 !	730	l U	ļ
!	51-28-5	2,4-Dinitrophenol		<u>.</u>	3500	וּט	٠!
!	100-02-7	4-Nitrophenol		 !	3500	IU	!
!	132-64-9	Dibenzofuran		<u></u> !	730	וט	!
- 1	121-14-2	2, 4-Dinitrot oluen	e	!	730	IU	ļ
1	606-20-2	2,6-Dinitrotoluen	e	!	.730	U	- [
- 1	84-66-2	Diethylphthalate_	 	!	730	U	i
ļ	7005-72-3	4-Chlorophenyl-ph	enylether _.	1	730	U	ı
-1	86-73-7	Fluorene		1	730	U	-
-		4-Nitroaniline		1	3500	I U	-
-	534-52-1	4,6-Dinitro-2- <mark>Met</mark>	hylphenol	1	3500	ľ	1
1	86-30-6	N-Nitrosodiphenyl	amine (1)	1	730	l U	1
-	101-55-3	4-Bromophenyl-phe	nylether_	1	730	Į Ū	i
- 1	118-74-1	Hexachlorobenzene		1	730	U	-
-1	87-86-5	Pentachlorophenol		1	3500	10	1
1	85-01-8	Phenanthrene		ı	330]J (-1
Ì	120-12-7	Anthracene		1	730	U	Ī
i	84-74-2	Di-n-But yl pht hala	te	 i	730	I U	Ĺ
Ĺ	206-44-0	Fluoranthene		i	380	J	Ť
i	129-00-0	Pyrene		1	220	13 \	i
i	85-68-7	Butylbenzylphthal	ate	i	730	IU	i
i	91-94-1	3,3'-Dichlorobenz	idine		1500	IU_	i
Ė	56-55-3	Bénzo(a)Anthracen	е	i	160	13	Ĺ
i	117-81-7	bis(2-Ethylhexyl)	Phthalate	1	150	13	i
i.	218-01-9	Chrysene	•	i	250	13	i
i	117-84-0	Di-n-Octyl Phthal	ate	i	730	IU.	İ
Ĺ	205-99-2	Benzo(b)Fluoranth	ene	i	370	11	Ì
i	207-08-9	Benzo(k)Fluoranth	ene	i	730	IU	Ĺ
i	50-32-8	Benzo(a)Pyrene		i	200	11	ĺ
i	193-39-5	Indeno(1,2,3-cd)P	yrene	1	210	J	Ì
i	53-70-3	Dibenz(a, h)Anthra	cene	i	730		i
i	191-24-2	Benzo(g, h, i)Peryl	ene		250	J	Ì
Ĺ						T	_
(1) - Cannot be s	separated from Diph	enylamine				-

1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EHQ49

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ49B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: / EHQ49B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 9 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 8.8 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found: 17

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
======================================	I UNKNOWN	1 4.32	======== 	===== J
2.	UNKNOWN	4.90	800	J
3.	UNKNOWN	6.48	1000	J
4. $90-12-0$	1-METHYL NAPHTHALENE	13.63	400	J
5. 571-58-4	1, 4-DIMETHYL NAPHTHALENE	15.65	200	J
6	UNKNOWN ALKANE	17.15	200	J
7.	UNKNOWN ALKANE	20.33	800	J
8	I UNKNOWN ALKANE	1 21.70	300	J
9	UNKNOWN ALKANE	21.82	300	J
10	UNKNOWN ALKANE	23.08	400	J
11	UNKNOWN ALKANE	24.47	300	J
12.10544-50-0	SULFUR	1 24.70	1000	J
13	UNKNOWN ALKANE	35.43	1000	J
14	1 UNKNOWN	36.43	1000	J
15.	UNKNOWN ALKANE	37.47	400	J
16.	I UNKNOWN	37.65	600	J
17.	. UNKNOWN	37.78	500	J

1B SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EHQ50

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ50B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ50B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 20 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L o	r ug/Kg)	UG/KG	Q
1			1		1 1
1 108-95-2	Phenol		1	830	U
111-44-4	bis(2-Chloroe	thyl)Ether	I	830	ו עו
1 95-57-8	2-Chloropheno	1	!	830	IU I
541-73-1	1.3-Dichlorob	enzene	1	830	ו טן
1 100-10-7	1 A-Diablawah	00000	1	830	IU I
100-51-6	Benzyl Alcoho	1		830	l U
95-50-1	1, 2-Dichlorob	enzene	1	830	ן טן
95-48-7	2- M ethylpheno	1	I	830	ו טו
39638-32-9	Benzyl Alcoho1, 2-Dichlorob2-Methylphenobis (2-Chloroi	sopropyl)Eth	er	830	ו עו
106-44-5	4-Met hylpheno N-Nitroso-Di-	l	1	830	IU I
621-64-7	N-Nitroso-Di-	n-Propylamin	e!	830	ן טן
67-72-1	·Hexachloroeth	ane	ŀ	830	ן ען
98-95-3	Nitrobenzene		1	830	ו טו
1 78-59-1	Isophoropa		1	830	ו טו
88-75-5	2-Nitrophenol		1	830	IU I
105-67-9	2, 4-Dimethylp	henol		830	l U
65-85-0	Benzoic Acid_		1	4000	U
111-91-1	Benzoic Acid_ bis(2-Chloroe	thoxy) Methan	e	830	ו עו
120-83-2	2, 4-Dichlorop	henol	1	830	ו טן
120-82-1	2, 4-Dichlorop 1, 2, 4-Trichlo	robenzene	1	830	10 1
91-20-3	Naphthalene			130	اللا
106-47-8	4-Chloroanili	ne	I	830	1 U 1
87-68-3	Hexachlorobut	adiene	1	830	IU I
59-50-7	4-Chloro-3-Me	thylphenol	1		10-1
1 91-57-6	2-Met hylnapht	halene	1	160	
1 77-47-4	He xachlor ocyc	lopentadiene	i	830	10 1
88-06-2	2. 4. 6-Trichlo	rophenol	1	830	ו טו
1 95-95-4	2. 4. 5-Trichlo	rophenol	1	4000	1 U 1
1 91-58-7	2-Chloronapht	halene	1	830	ן טן
1 88-74-4	2-Nitroanilin	e		4000	ו עו
131-11-3	Dimethyl Phth	alate		<u>830</u>	_LU
208-96-8	Acenapht hylen	e	1	13	13 / 1
l			1		7

EHQ50

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: EHQ50B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EHQ50B

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 20 dec. Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG

| 99-09-2----3-Nitroaniline___ 4000 IU | 83-32-9-----Acenaphthene 64 IJ | 51-28-5----2, 4-Dinitrophenol 4000 U 100-02-7----4-Nitrophenol 4000 IU. | 132-64-9-----Dibenzofuran_ 60 830 | 121-14-2----2, 4-Dinitrot oluene TU | 606-20-2----2, 6-Dinitrotoluene 830 1 U 1 84-66-2-----Diethylphthalate 830 ΙŪ 7005-72-3----4-Chlorophenyl-phenylether 830 LU | 86-73-7-----Fluorene_ 59 | 100-10-6-----4-Nitroaniline 4000 IU | 534-52-1----4, 6-Dinitro-2-Methylphenol_ 4000 ΙÜ | 86-30-6----N-Nitrosodiphenylamine (1)IU 830 | 101-55-3----4-Bromophenyl-phenylether___ 830 | U 118-74-1-----Hexachlorobenzene 830 IU | 87-86-5-----Pentachlorophenol_ 4000 $\mathbf{L}\mathbf{U}_{-}$ | 85-01-8-----Phenanthrene 730 J | 120-12-7-----Anthracene 170 | 84-74-2----Di-n-Butylphthalate 830 IU 206-44-0-----Fluoranthene 1600 ΙE | 129-00-0-----Pyrene_ 1100 | 85-68-7-----Butylbenzylphthalate 830 ΙU 91-94-1----3, 3'-Dichlor obenzidine 1700 IU 56-55-3-----Benzo(a)Anthracene 840 117-81-7----bis(2-Ethylhexyl)Phthalate 830 IU | 218-01-9-----Chrysene 560 IJ ĪŪ | 117-84-0-----Di-n-Octyl Phthalate 830 205-99-2----Benzo(b)Fluoranthene___ 860 | 207-08-9-----Benzo(k)Fluoranthene 460 IJ 1 50-32-8-----Benzo(a)Pyrene_ 420 IJ | 193-39-5----Indeno(1, 2, 3-cd)Pyrene 340 11 | 53-70-3-----Dibenz(a, h)Anthracene___ 140 IJ 191-24-2----Benzo(g, h, i)Perylene_ 440

(1) - Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EHQ50	
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Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 14960 SAS No.: ____ SDG No.: EHQ42

Matrix: (soil/water) SOIL

Lab Sample ID: EHQ50B

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: EHQ50B

Level: (low/med) LOW___

Date Received: 09/26/90

% Moisture: not dec. ____ dec. ____

Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 10/23/90

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.0

CONCENTRATION UNITS:

Number TICs found: 20	(ug/L	or ug/Kg) <u>UG/KG</u>
1			1
CAS NUMBER	COMPOUND NAME	RT	EST. CO
======================================	=======================================	=======	========

i						ı
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	İ
į	==============		======	=========	=====	į.
	1	UNKNOWN	4.90	2000	J	f
	2.	UNKNOWN	6.47	2000	J	ĺ
	3.90-12-0	1-METHYL NAPHTHALENE	13.62	1000	J	İ
	4	DIMETHYL NAPHTHALENE ISOMER	15.38	400	J	į
	5	DIMETHYL NAPHTHALENE ISOMER	15.63	1000	J	İ
1	6	DIMETHYL NAPHTHALENE ISOMER	15.97	600	J	İ
	17.	UNKNOWN PNA	22.90	600	J	İ
ı	8	UNKNOWN	23.18	700	J	ĺ
ĺ	9.	UNKNOWN	23.98	800	J	ĺ
1	10.	UNKNOWN	25.98	2000	J	i
	11.	UNKNOWN PNA	27.12	700	J	İ
-	12.	UNKNOWN PNA	29.05	800	J	i
	13.	UNKNOWN PNA	29.35	500	J	İ
ı	14.	UNKNOWN	29.48	1000	J	İ
j	$15. \ \overline{82-05}-3$	7H-BENZ [DE]ANTHRACEN-7-ONE	29.83	600	J	Ì
1	16.	UNKNOWN PNA	31.80	600	J	ĺ
	17.	I UNKNOWN PNA	34.30	2000	J	Ĺ
1	18.	I I/NIDUIY UNKNOWN _ I	34.65	2000	J	ĺ
ĺ	119. $\overline{205-8}2-3$	BENZO[J] FLUORANTHENE	34.80	6000	J	Ī
- 1	20.	UNKNOWN PNA	37.97	1000	J	İ
ĺ	1	1 (~1) 9			i İ	1

EPA SAMPLE NO.

EHQ42

Lab Name: ENCOTEC-AA Contract: 68-D9-0033 |

Matrix: (soil/water) <u>SOIL</u> Lab Sample ID: <u>60224</u>

Sample wt/vol: 30.0 (g/mL) 6 Lab File ID:

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 20 dec. ___ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/24/90

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.00

CONCENTRATION UNITS:

	CAS NO.	COMPOUND		ug/Kg)		Q	
?				 ;		ŀ	!
1	319-84-6	-alpha-BHC		 	20	١U	ì
ł	319-85-7	-beta-BHC		 	20	ΙU	1
í	319-86-8	-delta-BHC		1	20	١U	1
1	58-89-9	-Lindane		 }	20	١U	1
ł	76-44-8	-Heptachlor		;	20	١U	;
1	309-00-2	-Aldrin		 ;	20	١U	†
;	1024-57-3	-Heptachlor epoxide	2	 	20	١U	ł
ł	959-98-8	-Endosulfan I		 	20	ΙU	ŧ
;	60-57-1	-Dieldrin		1	40	١U	;
!	72-55-9	-4,4'-DDE		;	40	ΙU	1
ŀ	-72-20- 8	-Endrin			40	; U	;
;	33213-65-9	-Endosulfan II			40	!U	1
ł	72-54-8	-4,4'-DDD		 	40	١U	;
i	1031-07-8	-Endosulfan sulfate	<u> </u>		40	ŀU	1
ł	50-29-3	-4,4'-DDT		 	40	١U	ŧ
į	72-43-5	-Methoxychlor		 ;	200	١U	1
;	53494-70-5	-Endrin ketone		 	40	IJΠ	1
ŀ	5103-71-9	-alpha-Chlordane		 ;	200	١U	1
;	5103-74-2	-gamma-Chlordane		 ;	200	١IJ	ļ
1	8001-35-2	-Toxaphene		 ;	400	١U	1
ł	12674-11-2	-Aroclor-1016		¦	200	١U	1
¦	11104-28-2	-Aroclor-1221		 ;	200	ŀΠ	}
;	11141-16-5	-Aroclor-1232		 ;	200	ΙU	1
ŀ	53469-21-9	-Aroclor-1242		 !	200	: U	ł
ł	12672-29-6	-Aroclor-1248		 	200	١U	!
ł	11097-69-1	-Aroclor-1254		 !	400	111	1
ţ	11096-82-5	-Aroclor-1260		 :	400	١U	}
!_				 ;		_	

EPA SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS DATA	SHEE!
Lab Name: <u>ENCOTEC-AA</u> Contra	: EHQ43 ct: <u>68-D9-0033</u> ;
Lab Code: <u>ENCOT</u> Case No.: <u>14960</u> SAS N	o.:SDG No.: <u>EHQ42</u>
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID: 60225
Sample wt/vol: 30.0 (g/mL) G	Lab File ID:
Level: (low/med) <u>LOW</u>	Date Received: <u>09/26/90</u>
% Moisture: not dec. <u>17</u> dec	Date Extracted: <u>09/27/90</u>
Extraction: (SepF/Cont/Sonc) <u>SONC</u>	Date Analyzed: 10/24/90
GPC Cleanup: (Y/N) Y pH: 7.5	Dilution Factor: 1.00
	CENTRATION UNITS: /L or ug/Kg) <u>UG/KG</u> Q
: : 319-84-6alpha-BHC	19 U

	CAS NU.	COMPOUND	tug/L or ug/k	.g, <u>U6/K.G</u>	f:l	!
ļ	····				1	 ;
1	319-84-6	alpha-BHC		19	١U	;
ł	319-85-7	beta-BHC	-	19	ŧυ	ŀ
1	319-86-8	delta-BHC	:	19	١U	1
ŀ	58-89-9	Lindane	1	19	١U	ŧ
;	76-44-8	Heotachlor	!	19	١U	- 1
1	309-00-2	Aldrin	-	19	ŀU	}
ļ	1024-57-3	Heptachlor epoxide	<u> </u>	19	١U	}
1	959-98-8	Endosulfan I	!	19	١U	;
1	60-57-1	Dieldrin	}	39	١U	;
;	- 72-55-9	4.4'-DDE	:	39	١U	!
1	72-20-8	Endrin	;	39	ΙU	}
ţ	33213-65-9	Endrin		39	ŀU	- 1
i	72-54-8	4,4'-DDD	1	39	ŧυ	;
1	1031-07-8	Endosulfan sulfate	!	39	ΙU	1
;	50-29-3	4,4'-DDT	1	39	ΙU	+
ì	72-43-5	Methoxychlor	1	190	ŀU	1
1	53494-70-5	Endrin ketone		39	:U	-
;	5103-71-9	alpha-Chlordane	1	190	ΙU	- 1
ì	5103-74-2	gamma-Chlordane	1	190	¦U	ł
ŀ	8001-35-2	Toxaphene	;	390	ŀU	+
-	12674-11-2	Aroclor-1016	:	190	ΙU	1
ŀ	11104-28-2	Aroclor-1221	<u> </u>	190	ΙU	- 1
i	11141-16-5	Aroclor-1232	i	190_	;	;
!	53469-21-9	Aroclor-1242		3400	1 X	1
1	12672-29-6	Aroclor-1248	;	190	ΙU	1
;	11097-69-1	Aroclor-1254		390	١U	!
1	11096-82-5	Aroclor-1260		390	١U	;
ŀ					1	1

Lab	Name:	ENCOTEC-AA	Contract:	68-D9-0033	: EMW44 !

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) <u>SOIL</u> Lab Sample ID: 60226

Sample wt/vol: 30.0 (g/mL) 6 Lab File ID:

Level: (Iow/med) LOW Date Received: <u>09/26/90</u>

% Moisture: not dec. <u>19</u> dec. ___ Date Extracted: <u>09/27/90</u>

Extraction: (SepF/Cont/Sonc) <u>SONC</u> Date Analyzed: <u>10/24/90</u>

GPC Cleanup: (Y/N) Y pH: 7.4 Dilution Factor: 1.00

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) <u>UG/KG</u> Q

1			ŧ	;
ŀ	319-84-6alpha-BHC	20	:U	;
ì	319-85-7beta-BHC	i 20	ΙU	!
ŀ	319-86-8delta-BHC	20	ΙU	1
;	58-89-9Lindane	20	:U	Ļ
ł	76-44-8Heptachlor	1 20	ΙU	1
Į	309-00-2Aldrin	(20	ŧυ	ŧ
ļ	1024-57-3Heptachlor epoxide	; 20	ΙU	
;	959-98-8Endosulfan I	1 20	ΙU	t
ļ	60-57-1Dieldrin	40	: U	
ŀ	72-55-94,4'-DDE	1 40	ΙU	-
;	72-20-8Endriñ	l 40	ΙU	1
1	33213-65-9Endosulfan II	1 40	ΙU	ļ
ŀ	72-54-84,4'-DDD	40	ΙU	ł
ł	1031-07-8Endosulfan sulfate	40	١U	+
i i	50-29-34,4'-DDT	40	۱U	;
ŀ	72-43-5Methoxychlor	200	١IJ	ł
ļ	53494-70-5Endrin ketone	40	ΙU	;
ŀ	5103-71-9alpha-Chlordane	200	ΙÜ	;
1	5103-74-2qamma-Chlordane	200	ΙU	1
i	8001-35-2Toxaphene	400	łШ	1
1	12674-11-2Aroclor-1016	200	١U	}
!	11104-28-2Aroclor-1221	200	ΙU	:
!	11141-16-5Aroclor-1232_	200	_اللــ	;
ļ	53469-21-9Aroclor-1242	5300	<u>:x</u> \	}
1	12672-29-6Aroclor-1248	200	l U	ľ
ţ	11097-69-1Aroclor-1254	400	ΙU	ł
ţ	11096-82-5Aroclor-1260	400	ΙU	}.
1		ı		

EPA SAMPLE NO.

					1	たけいササンに
Lab	Name:	ENCOTEC-AA	Contract:	68-D9-0033	١	

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) <u>SOIL</u> Lab Sample ID: <u>602263</u>

Sample wt/vol: 30.0 (g/mL) 6 Lab File ID:

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. <u>19</u> dec. <u>Date Extracted: <u>09/27/90</u></u>

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/24/90

GPC Cleanup: (Y/N) Y pH: 7.4 Dilution Factor: 3.00

	CAS NO.	COMPOUND		ATION (ug/Kg	JNITS: DG/KG	Q	!
!				ŀ		1	
1	319-84-6	-alpha-BHC		 ;	59	ΙU	1
¦	319-85-7	-beta-BHC		1	59	ŧυ	1
i	319-86-8	-delta-BHC		;	59	١U	1
ŀ	58-89-9	-Lindane		1	59	١U	1
1	76-44-8	-Heptachlor		1	59	ΙU	1
ļ	309-00-2	-Aldrin		ł	59	ΙU	1
ļ	-1024-57-3	-Heptachlor epoxide	2	- 1	59	١U	1
1	959-98-8	-Endosulfan I		 ¦	59	l U	1
;	60-57-1	-Dieldrin		:	120	HU	;
1	72-55-9	-4,4'-DDE		;	120	١U	1
1	-72-20-8	-Endrin		- 1	120	ΙU	1
1	33213-65-9	-Endosulfan II		1	120	ΙU	1
1	72-54-8	-4.4'-DDD		;	120	١U	1
ŀ	1031-07-8	-Endosulfan sulfate	2	+	120	łU	1
ŀ	50-29-3	-4,4'-DDT		ŀ	120	١U	;
ļ	72-43-5	-Methoxychlor		1	590	ΙU	!
!	53494-70-5	-Endrin ketone		¦	120	۱U	1
1	5103-71-9	-alpha-Chlordane		;	590	l U	ł
ŀ	5103-74-2	-gamma-Chlordane		;	590	; U	}
1	8001-35-2	-Toxaphene		-	1200	۱U	;
ŀ	12674-11-2	-Aroclor-1016		;	590	ŧυ	1
1	11104-28-2	-Aroclor-1221		;	590	۱U	}
!	11141-16-5	-Aroclor-1232		ţ	<u> 590</u>		, ;
!	53469-21-9	-Aroclor-1242		ł	6200	: DX	\ :
ľ	12672-29-6	-Aroclor-1248		ł	590	IU	- ;
1	11097-69-1	-Aroclor-1254		!	1200	ΙU	}
ł	11096-82-5	-Aroclor-1260		 !	1200	١u	;
!_				 '		_	:

Matrix: (soil/water) SOIL

EHQ45

60227

Lab	Name:	ENCOTEC-A	4	 	Contract:	68-D9-0033	_	 	¦
	- .	THOOT	_	 4.4555				 	

Lab Sample ID:

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 31 dec. __ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/24/90

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.00

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) <u>UG/KG</u> Q | 319-84-6----alpha-BHC_____| 23 !U : 319-85-7-----beta-BHC_____ 23 ! U : 319-86-8-----delta-BHC_____: 23 : 11 1 58-89-9-----Lindane_____1 23 !U ! 76-44-8------Heptachlor_____| 23 !U : 309-00-2-----Aldrin_____: 23 10 | 1024-57-3-----Heptachlor epoxide_____| 23 :U : 959-98-8-----Endosulfan I_____: 23 H ! 60-57-1-----Dieldrin_____! 46 ! ! ! 72-55-9-----4,4'-DDE____! 46 l U | 72-20-8-----Endrin____| | 33213-65-9-----Endosulfan II_____| 46 !U 46 !U 1 72-54-8-----4,4'-DDD_____ 46 10 : 1031-07-8-----Endosulfan sulfate_____: 4F. l U | 50-29-3-----4,4'-DDT____! 46 :U | 72-43-5-----Methoxychlor_____| 230 : U | 53494-70-5----Endrin ketone____| IU 46 | 5103-71-9----alpha-Chlordane_____| 230 IU : 5103-74-2-----gamma-Chlordane____: 230 : U | 8001-35-2----Toxaphene____| 460 111 | 12674-11-2----Aroclor-1016_____| 230 l U | 11104-28-2----Aroclor-1221______ 230 :U : 11141-16-5-----Aroclor-1232_____; 230 :U | 53469-21-**9-----Aroclor-**1242_____| 6000 l X | 12672-29-6-----Aroclor-1248_____ 230 ΙŪ | 11097-69-1----Aroclor-1254_____| 460 !U | 11096-82-5----Aroclor-1260_____ 460 :U

| 8001-35-2-----| | 8001-35-2-----|

| 12674-11-2----Aroclor-1016_____|

| 11104-28-2----Aroclor-1221_____;

| 11141-16-5----Aroclor-1232______

: 53469-21-9-----Aroclor-1242_____:

: 12672-29-6-----Aroclor-1248_____:

: 11097-69-1----Aroclor-1254_____;

! 11096-82-5----Aroclor-1260_____!

EPA SAMPLE NO.

EHQ45DL Lab Name: ENCOTEC-AA Contract: 68-D9-0033 Lab Code: ENCOT __ Case No.: 14960 SAS No.: ____ SDG No.: EHQ42 Lab Sample ID: Matrix: (soil/water) SOIL 602272 30.0 (g/mL) G Lab File ID: Sample wt/vol: Level: (low/med) LOW Date Received: 09/26/90 % Moisture: not dec. 31 dec. Date Extracted: 09/27/90 Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/24/90 GPC Cleanup: (Y/N) <u>Y</u> pH: <u>7.1</u> Dilution Factor: 2.00 CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q : 319-84-6----alpha-BHC____: 46 :U 319-85-7-----beta-BHC______ 46 10 | 319-86-8-----delta-BHC_____| 46 ;U | 58-89-9------| | 58-89-9------| 46 10 : 76-44-8-----Heptachlor_____ 46 10 | 309-00-2-----Aldrin_____ 46 l U : 1024-57-3-----Heptachlor epoxide_____! 46 : U : 959-98-8-----Endosulfan I_____: 46 10 | 60-57-1-----Dieldrin_____| 93 10 1 72-55-9-----4,4'-DDE_____! 93 10 72-20-8-----Endrin____| 93 : U | 33213-65-9----Endosulfan II_____ 93 10 1 72-54-8-----4,4'-DDD_____ 93 ¦ U | 1031-07-8-----Endosulfan sulfate_____: 93 : U | 50-29-3-----4,4'-DDT____| 93 10 | 72-43-5-----Methoxychlor____| 460 10 | 53494-70-5----Endrin ketone____| 93 l U | 5103-71-9-----alpha-Chlordane_____! 460 !U : 5103-74-2----gamma-Chlordane_____; 460 1 U

930

460

460

460

460

930

930

6400

10

:U

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Extraction: (SepF/Cont/Sonc)

EPA SAMPLE NO.

Date Analyzed: 10/24/90

Lab Name: ENCOTEC-AA Contract: 68-D9-0033 Matrix: (soil/water) SOIL Lab Sample ID: 60228 Sample wt/vol: <u>30.0</u> (g/ml) G Lab File ID: Level: (low/med) LOW Date Received: <u>09/26/90</u> % Moisture: not dec. <u>37</u> dec. Date Extracted: 09/27/90

Dilution Factor: __1.00 GPC Cleanup: (Y/N) <u>Y</u> pH: <u>7.4</u>

SONC

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) <u>UG/KG</u> Q : 319-84-6-------alpha-BHC_____: 25 l U 319-85-7----beta-BHC_____! 25 :U : 319-86-8-----delta-BHC____: 25 : U | 58-89-9-----Lindane_____| 25 !U | 76-44-8-----Heptachlor____| 25 : U 25 !U ! 1024-57-3-----Heptachlor epoxide_____! 25 :U | 959-98-8-----Endosulfan I_____ 25 !U | 60-57-1-----Dieldrin_____ 51 :U 1 72-55-9-----4,4'-DDE_____1 51 !U | 72-20-8-----Endrin______ 51 l U | 33213-65-9----Endosulfan II_____| 51 l U 72-54-8-----4,4'-DDD:_____ 51 :U : 1031-07-8-----Endosulfan sulfate_____: 51 l U | 50-29-3-----4,4'-DDT_____} 51 :U | 72-43-5-----Methoxychlor____| 250 l U ! 53494-70-5----Endrin ketone____! 51 :U : 5103-71-9-----alpha-Chlordane_____; 250 l U | 5103-74-2----gamma-Chlordane_____! 250 IU 510 :U | 12674-11-2----Aroclor-1016_____; 250 l U | 11104-28-2----Aroclor-1221_____| 250 !U 11141-16-5----Aroclor-1232______ 250 l U : 53469-21-9-----Aroclor-1242_____: 5600 īχį | 12672-29-6-----Aroclor-1248_____| 250 ١Ū | 11097-69-1----Aroclor-1254_____| ١U 510 ! 11096-82-5----Aroclor-1260_____| 510 10

EPA SAMPLE NO.

EHQ46DL |

Lab Name: ENCOTEC-AA Contract: 68-D9-0033 !_____

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EH042

Matrix: (soil/water) <u>SOIL</u> Lab Sample ID: <u>602282</u>

Sample wt/vol: 30.0 (g/mL) 6 Lab File ID:

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 37 dec. __ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) <u>SONC</u> Date Analyzed: <u>10/25/90</u>

GPC Cleanup: (Y/N) Y pH: 7.4 Dilution Factor: 2.00

			CONCE	VTR/	IU NOITA	VITS:		
CAS	5 NO.	COMPOUND	(ug/L	or	ug/Kg)	<u>UG/KG</u>	Q	
1	·				!		1	!
1 319	9-84-6	-alpha-BHC				51	ΙU	+
319	9-85-7	-beta-BHC			;	51	ΙU	- 1
319	9-86-8	-delta-BHC			1	51	ΙU	1
: 58-	-89-9	-Lindane			ļ	51	١IJ	1
1 76-	-44-8	-Heptachlor			1	51	ΙU	;
1 309	9-00-2	-Aldrin -Heptachlor epoxide			(51	: U	ł
1 102	24-57-3	-Heptachlor epoxide				51	١U	;
1 959	9-98-8	-Endosulfan I			1	51	ΙU	-
: 60-	-57 - 1	-Dieldrin			1	100	١U	1
1 72-	-55-9	-4,4'-DDE			{	100	ΙU	1
1 72-	-20-8	-Endrin			1	100	١U	;
1 332	213-65-9	-Endosulfan II			!	100	:U	1
1 72-	-54-8	-4,4'-DDD -Endosulfan sulfate			;	100	10	;
1 103	31-07-8	-Endosulfan sulfate				100	ΙU	ł
: 50-	-29-3	-4.4'-DDT			:	100	:U	!
1 72-	-43-5	-Methoxychlor			;	510	ΙU	1
1 534	194-70-5	-Endrin ketone			1	100	١U	1
1 510	03-71-9	-alpha-Chlordane			1	510	١U	!
: 510	03-74-2	-gamma-Chlordane			1	510	١U	1
1 800	01-35-2	-Toxaphene			1	1000	¦U	- 1
1 126	574-11-2	-Aroclor-1016			;	510	:U	}
111	104-28-2	-Aroclor-1221			1	510	ΙU	1
1111	141-16-5	-Aroclor-1232			;	510	١U	!
534	469-21-9 -	-Aroclor-1242			1	6300	:DX	1
1 126	572-29-6	-Aroclor-1248			ł	510	:U	ŀ
1 110	97-69-1	-Aroclor-1254				1000	¦U	!
1110	96-82-5	-Aroclor-1260				1000	١U	1
ł					- 		_	{

EHQ47

						L) (C(T)
Lab	Name:	ENCOTEC-AA	Contract:	<u>68-D9-0033</u>	۱	

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) SOIL Lab Sample ID: 60229

Sample wt/vol: 30.0 (g/mL) 6 Lab File ID:

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. <u>18</u> dec. <u>Date Extracted: 09/27/90</u>

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/24/90

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.00

	CAS NO. COMPOUND		or ug/		(3
-1			-		1	
;	319-84-6alpha-BHC_		;	20	١U	1
ł	319-85-7beta-BHC		1	20	۱U	:
;	319-86-8delta-BHC		;	20	: U	!
;	58-89-9Lindane			20	۱U	1.
ł	<i>7</i> 6-44-8Heptachlor		;	20	ŧυ	!
ļ	309-00-2Aldrin		;	20	١U	1
1	1024-5/-3Heptachion	epoxide		20	¦U	;
-	959-98-8Endosulfan	I		20	١IJ	;
ł	60-57-1Dieldrin		:	39	١U	!
1	72-55-94.4'-DDE			. 39	١U	1
!	72-20-8Endrin			39	١U	;
1	72-20-8Endrin 33213-65-9Endosulfan	II		39	ΙU	ł
;	72-54-84,4'-DDD		3	39	ΙU	1
¦	-1031-07-8Endosulfan	sulfate	i	39	۱U	1
;	50-29-34,4'-DDT			39	١U	}
1	72-43-5Methoxychl	or		200	ΙU	:
ļ	53494-70-5Endrin ket	one	i	39	١U	1
1	5103-71-9alpha-Chlo	rdane	!	200	ΙÜ	1
;	5103-74-2gamma-Chlo	rdane	:	200	łU	1
ŀ	8001-35-2Toxaphene		:	390	ΙU	1
1	12674-11-2Aroclor-10	16	ľ	200	IП	1
i	11104-28-2Aroclor-12	21		200	ΙU	1
ŧ	11141-16-5Aroclor-12	32	;	200	١U	;
ł	53469-21-9Aroclor-12	42		200	10	}
1	12672-29-6Aroclor-12	48	{	200	١U	}
;	11097-69-1Aroclor-12	54 <u></u>		390	<u> </u>	;
1	11096-82-5Aroclor-12	60	!	1200	_ I X]	{
!_			:	 	_	;

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

Lab Name: ENCOTEC-AA Contract: 68-D9-0033 :

Matrix: (soil/water) <u>SOIL</u> Lab Sample ID: <u>602292</u>

Level: (low/med) LOW Date Received: 09/26/90

Extraction: (SepF/Cont/Sonc) <u>SONC</u> Date Analyzed: <u>10/25/90</u>

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 2.00

CONCENTRATION UNITS:

	CAS NO.	COMPOUND			ug/Kg)	UG/KG	Q	!
ŀ				·	:		 	
ł	319-84-6	alpha-BHC				39	١U	1
ŀ	319-85-7	beta-BHC			1	39	ΙU	1
ŀ	319-86-8	delta-BHC			}	39	ΙU	;
ŀ	58-89-9	Lindane			1	39	١U	;
ļ	76-44-8	Heptachlor			1	39	١U	!'
ľ	309-00-2	Aldrin			1	39	١U	1
ŀ	1024-57-3	Heptachlor epoxide	2		1	39	١U	1
ŀ	959-98-8	Endosulfan I		·	!	39	ΙU	- 1
ŀ	60-57-1	Dieldrin			1	78	¦ U	1
;	72-55-9	4,4'-DDE			ļ	78	١U	1
l	- 72-20-8	Endrin			;	78	: U	1
ŀ	-33213-65-9	Endosulfan II			<u> </u>	78	ΙU	+
!	- 72-54-8	4.4'-DDD			1	78	l U	;
ì	1031-07-8	Endosultan sultate			!	78	ΙU	!
;	50-29-3	4.4'-DDT			:	78	١U	- 1
;	72-43-5	Methoxychlor				390	:U	!
ŀ	53494-70-5	Endrin ketone			;	78	ΙU	1
ļ	5103-71-9	alpha-Chlordane			;	390	ŀŲ	}
!	5103-74-2	gamma-Chlordane			:	390	¦U	ł
!	8001-35-2	Toxaphene			1	780	١IJ	}
;	12674-11-2	Aroclor-1016			;	390	١U	;
ļ	11104-28-2	Aroclor-1221			1	390	١U	;
;	11141-16-5	Aroclor-1232			+	390	١U	1
ŧ	53469-21-9	Aroclor-1242			!	390	۱U	;
;	12672-29-6	Aroclor-1248			1	390	:U	1
ŀ	11097-69-1	Aroclor-1254			:	780	۱U	;
	11096-82-5	Aroclor-1260			;	910	; DX	!
١.					'		_ '	'

EPA SAMPLE NO.

Lab Name: <u>ENCOTEC-AA</u> Contract: <u>68-D9-0033</u> |

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) <u>SOIL</u> Lab Sample ID: <u>60230</u>

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. <u>6</u> dec. <u>Date Extracted: 09/27/90</u>

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/24/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

	CAS NO.	COMPOUND			ATION UM ug/Kg)		Q
!							1 1
1	319-84-6	-alpha-BHC			!	17	וט ו
;	319-85-7	-beta-BHC			;	17	וט ו
;	319-86-8	-delta-BHC			!	17	10 1
i	58-89-9	-Lindane		. .	!	17	: 1
i	76-44-8	-Heptachlor				17	:U :
1	309-00-2	-Aldrin				17	!U !
1	1024-57-3	-Heptachlor epoxide) 		i	(140)	1 1
1	959-98-8	-Endosulfan I				17	:U ;
1	60-57-1	-Dieldrin			!	34	IU !
ŀ	72-55-9	-4.4'-DDE			1	34	U
ŀ	72-20-8	-Endrin			1	34	iu i
1	33213-65-9	-Endosulfan II			-	34	:U :
1	72-54-8	-4,4'-DDD	. _			34	¦U ;
-	1031-07-8	-Endosulfan sulfate	:		1	34	10 1
}	50-29-3	-4,4'-DDT			1	34	!U !
1	72-43-5	-Methoxychlor			;	170	:U :
1	53494-70-5	-Endrin ketone			}	34	:U :
1	5103-71-9	-alpha-Chlordane				170	:U :
1	5103-74-2	-gamma-Chlordane			1	170	iu i
ļ	8001-35-2	-Toxaphene			1	340	:U ;
1	12674-11-2	-Aroclor-1016			;	170	រប រ
ŀ	11104-28-2	-Aroclor-1221				170	:U :
1	11141-16-5	-Aroclor-1232				170	iu i
}	53469-21-9	-Aroclor-1242				170	!U !
1	12672-29-6	-Aroclor-1248			;	170	!U !
ļ	11097-69-1	-Aroclor-1254				. 340	:U :
!	11096-82-5	-Aroclor-1260			!	12600	1X] :
1							

EPA SAMPLE NO.
|-----|
| EHQ48DL |

______Contract: <u>68-D9-0033</u> Lab Name: ENCOTEC-AA Lab Code: ENCOT Case No.: 14960 SAS No.: _____ SDG No.: EHQ42 Lab Sample ID: Matrix: (soil/water) SOIL 602304 30.0 (g/mL) <u>G</u> Lab File ID: Sample wt/vol: 09/26/90 Level: (low/med) Date Received: LOW Date Extracted: <u>09/27/90</u> % Moisture: not dec. <u>6</u> dec. Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/25/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 4.00

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Ω 1 | 319-84-6----alpha-BHC______| 68 : U | 319-85-7----beta-BHC_____ 68 l U : 319-86-8-----delta-BHC____: 68 !U : 58-89-9------!indane_____: 68 ΙU 76-44-8-----Heptachlor____ 68 :U | 309-00-2-----Aldrin_____ 68 ١U | 1024-57-3-----Heptachlor epoxide_____| 180 :DX | 959-98-8----Endosulfan I_____| 68 l U | 60-57-1-------| 140 :U 1 72-55-9-----4,4'-DDE_____ 140 IU 72-20-8-----Endrin______ 140 ١U | 33213-65-9----Endosulfan II_____ 140 ! U 1 72-54-8-----4,4'-DDD_____ 140 ! U | 1031-07-8-----Endosulfan sulfate_____ 140 \mathbf{H} : 50-29-3-----4,4'-DDT_____: 140 10 1 72-43-5-----Methoxychlor______ 680 ! U | 53494-70-5----Endrin ketone_____ 140 ;U : 5103-71-9-----alpha-Chlordane____: 680 !U | 5103-74-2----gamma-Chlordane_____; 680 10 | 8001-35-2-----Toxaphene____| 1400 111 : 12674-11-2----Aroclor-1016_____; :U 680 | 11104-28-2----Aroclor-1221______| 680 10 | 11141-16-5----Aroclor-1232______ 680 ;U 53469-21-9-----Aroclor-1242______ 680 10 | 12672-29-6-----Aroclor-1248______| 680 10 | 11097-69-1----Aroclor-1254_____| 1400 : U | 11096-82-5----Aroclor-1260_____; 2400 :DX

EPA SAMPLE NO.

EHQ49 Lab Name: ENCOTEC-AA Contract: <u>68-D9-0033</u> Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42 Matrix: (soil/water) SOIL Lab Sample ID: 60231 Sample wt/vol: <u>30.0</u> (g/mL) <u>G</u> Lab File ID: Level: (low/med) 09/26/90 LOW Date Received: Date Extracted: 09/27/90 % Moisture: not dec. <u>9</u> dec. SONC Extraction: (SepF/Cont/Sonc) Date Analyzed: 10/24/90

GPC Cleanup: (Y/N) Y pH: 8.8 Dilution Factor: 1.00

CONCENTRATION UNITS: COMPOUND CAS NO. (ug/L or ug/Kg) UG/KG Q | 319-84-6----alpha-BHC_____; 18 l U | 319-85-7-----beta-BHC______ 18 !U : 319-86-8------delta-BHC_____: l U 18 | 58-89-9-----Lindane_____| 18 !U | 76-44-8-----Heptachlor____| 18 l U | 309-00-2-----Aldrin_____| | 1024-57-3-----Heptachlor epoxide_____| 18 !U 18 l U : 959-98-8-----Endosulfan I_____: 10 18 | 60-57-1-----Dieldrin_____ 35 :U 1 72-55-9-----4,4'-DDE_____ 35 l U | 72-20-8-----Endrin_____ 35 10 | 33213-65-9----Endosulfan II_____ 35 lU. : 72-54-8-----4,4'-DDD______ 35 10 : 1031-07-8-----Endosulfan sulfate_____: 35 111 | 50-29-3-----4,4'-DDT_____| 35 !U | 72-43-5-----Methoxychlor_____| ! U 180 | 53494-70-5----Endrin ketone_____ 35 l U ! 5103-71-9----alpha-Chlordane____; 180 :U : 5103-74-2-----gamma-Chlordane_____ 180 l U | 8001-35-2----Toxaphene_____ 350 l U 12674-11-2----Aroclor-1016______ l U 180 l U 180 : 11141-16-5-----Aroclor-1232______: 180 ; U 53469-21-9-----Aroclor-1242_____ ! U 180 | 12672-29-6----Aroclor-1248_____| :U 180 ! 11097-69-1----Aroclor-1254_____: ١U 350 : 11096-82-5-----Aroclor-1260_____: 350 !U

EPA SAMPLE NO. |-----| | EHQ49DL |

Lab Name: ENCOTEC-AA	Contract: <u>68-D9-0033</u> ;	EHM4ADL
Lab Code: <u>ENCOT</u> Case No.: <u>14960</u>		
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID:	602312
Sample wt/vol: <u>30.0</u> (g/mL) <u>G</u>	Lab File ID:	
Level: (low/med) <u>LOW</u>	Date Received:	09/26/90
% Moisture: not dec. <u>9</u> dec	Date Extracted:	09/27/90
Extraction: (SepF/Cont/Sonc) <u>S</u>	ONC Date Analyzed:	10/25/90
GPC Cleanup: (Y/N) Y pH:	8.8 Dilution Factor	: 2.00

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 319-84-6----alpha-BHC______ 35 l U | 319-85-7-----beta-BHC______ 35 ; U : 319-86-8-----delta-BHC______ 35 10 58-89-9-----Lindane_____ 35 !U 76-44-8-----Heptachlor_____ 35 10 | 309-00-2-----Aldrin______ 35 : U 1 1024-57-3-----Heptachlor epoxide_____ 35 ! U 959-98-8-----Endosulfan I_____ 35 ! Ш ! 60-57-1-----Dieldrin_____ 70 : 11 72-55-9-----4,4'-DDE______ 70 10 72-20-8----Endrin____ 70 lU 33213-65-9----Endosulfan II_____ 70 1U 72-54-8-----4,4'-DDD_____ 70 10 : 1031-07-8-----Endosulfan sulfate____ 70 ! U 50-29-3-----4,4'-DDT_____ :U 70 | 72-43-5-----**Methoxychlor**_____ 350 ŀU | 53494-70-5----Endrin ketone______ 70 :U 5103-71-9-----alpha-Chlordane_____ 350 :U | 5103-74-2----gamma-Chlordane_____ 350 :U ! 8001-35-2----Toxaphene_____ 700 10 | 12674-11-2----Aroclor-1016____ 350 l U | 11104-28-2----Aroclor-1221_____ : U 350 | 11141-16-5----Aroclor-1232_____ 350 10 | 53469-21-9-----Aroclor-1242_____ 350 10 12672-29-6-----Aroclor-1248_____; :U 350 | 11097-69-1----Aroclor-1254______ 10 700 | 11096-82-5----Aroclor-1260_____ 700 ;U

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

EPA SAMPLE NO.

EHQ50

		•	
Lab Cados ENCOT	Caes No 14060	CAC No.	CDC No FUGAO

Lab Code: ENCOT Case No.: 14960 SAS No.: SDG No.: EHQ42

Matrix: (soil/water) <u>SOIL</u> Lab Sample ID: <u>602322</u>

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

Level: (low/med) LOW Date Received: 09/26/90

% Moisture: not dec. 20 dec. ___ Date Extracted: 09/27/90

Extraction: (SepF/Cont/Sonc) <u>SONC</u> Date Analyzed: <u>10/25/90</u>

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 2.00

	CAS NO.	COMPOUND			UNITS: g) <u>UG/KG</u>		Q	
1				1		1		!
!	319-84-6	a1pha-BHC		!	40	١U	;	ļ
;	319-85-7	beta-BHC		1	40	١U	1	ŀ
1	319-86-8	delta-BHC		:	40	١U	1	!
į	58-89-9	Lindane		1	40	١U	;	1
!	76-44-8	Heptachlor		1	40	: U	}	ſ
1	309-00-2	Aldrin		1	40	١U	;	1
;	-1024-57-3	Heptachlor epoxide	•		40	١U	;	!
1	959-98-8	Endosulfan I			40	١U	1	1
;	60-57-1	Dieldrin		+	80		1	!
1	72-55-9	4.4'-DDE		- !	71_) :	1
}	- 72-20-8	Endrin		1	80	ŧυ	i	;
!	33213-65-9	Endosultan il		•	80	! U	;	!
1	72-54-8	4,4'-DDD		;	80	:U	}	ļ
ŀ	1031-07-8	Endosulfan sulfate	•	:	80	ΙU	i	!
1	50-29-3	4,4'-DDT		1	80	:U	;	ļ
ŀ	-/2-43-5	Methoxychlor		ł	400	١U	į	!
!	53494-70-5	Endrin ketone		1	80	ŧυ	1	!
1	5103-71-9	alpha-Chlordane		1	400	١U	}	
1	5103-74-2	gamma-Chlordane		;	400	١U	;	
ł	8001-35-2	Toxaphene			800	١U	ł	l
ł	12674-11-2	Aroclor-1016		1	400	١U	1	
1	11104-28-2	Aroclor-1221		1	400	١U	!	l i
{	11141-16-5	Aroclor-1232		1	400	١U	}	
1	53469-21-9	Aroclor-1242		;	400	١U	ł	
1	12672-29-6	Araclor-1248		1	400	۱U	}	
}	11097-69-1	Aroclor-1254		:	800	١U	}	
1	11096-82-5	Aroclor-1260			800	ΙU	1	
!_				_		_	;	

PPG Industries, Inc. 760 Pittsburgh Drive Delaware, Ohio 43015 (614) 363-9610

Coatings and Resins

March 1, 1985

Mr. Bob Corbett
Mansfield Products
246 East Fourth Street
Mansfield, Ohio 44902

Dear Bob:

Below are the solvent percentages (by weight) as supplied to you for the products you used in 1984.

HIGH SOLIDS

	AG452W1519 (White)	AG452D1520 (Almond)	AG452Y1523 (Harvest)	AG452C1521 (Coffee)	AG452A1522 (Avocado)
Xylol	62.3	62.1	52.8	58.7	51.5
Toluol	6.8	5.1	7.3	6.1	7.2
Butanol	10.4	9.3	15.9		15.7
Isopropanol	1.7	1.6	1.2	1.1	1.2
Solvesso 100	9.7	8.9	8.5	2.4	15.1
Isopar E	2.4	3.2	3.7	2.2	2.5
Heptane	5.7	7.4	8.6	.5.2	5.7
Espesol 286	0.2			0.2	0.2
Butyl Acetate	0.5	0.7	0.8	0.5	0.5
PM Acetate		1.1	0.5		
Diacetone Alcohol				23.2	
Misc. Solvents	0.3	0.6	0.7	0.4	0.4
	100.0	100.0	100.0	100.0	100.0

Mansfield Products Company March 1, 1985 Page Two

DURACRON

	AG129W1 (101.21) (White)	AG129D1047 (Almond)	AG129H1045 (Harvest)	AG129C1048 (Coffee)	AG129A1046 (Avocado)
Xylol	38.2	38.4	32.4	28.3	33.2
Toluol	35.6	36.8	39.0	40.7	41.5
Butanol	5.7	6.0	6.6	11.8	7.0
Isobutanol	4.0	1.3	7.2	2.2	6.2
Solvesso 100	8.9	11.7	8.7	9.5	9.4
Cellosolve Acetate	0.2	0.2	0.3	0.3	0.3
Butyl Carbitol	4.9	3.4	3.5	3.4	
MEK	2.4	2.1	2.2	3.7	2,3
Misc. Solvents	0.1	0.1	0.1	0.1	0.1
• 1	100.0	100.0	100.0	100.0	100.0

WATER	REDUCIBLE	PRIMER
		11 F 60 10 C

	AG158G1281 (Gray W/R)	Gray W/R Cont:
Water	73.3	2-ethyl hexanol 8.2
Dimethyl Ethanol Amine	2.0	Pine Oil 1.0
Butyl Carbitol	4.8	Misc. Solvents 0.1
Butanol	3.3	100.0
Methyl Carbítol	4.8	
Texanol	1.0	
Butyl Cellosolve	1.5	

Mansfield Products Company March 1, 1985 Page Three

Please be reminded that the above solvent information is considered proprietary and should not be disclosed to any third parties other than the EPA.

If you have any questions, feel free to call.

Sincerely,

,

Burger St. B. Garage

Michael L. Sproule Technical Manager - Appliance Finishes MLS/kar

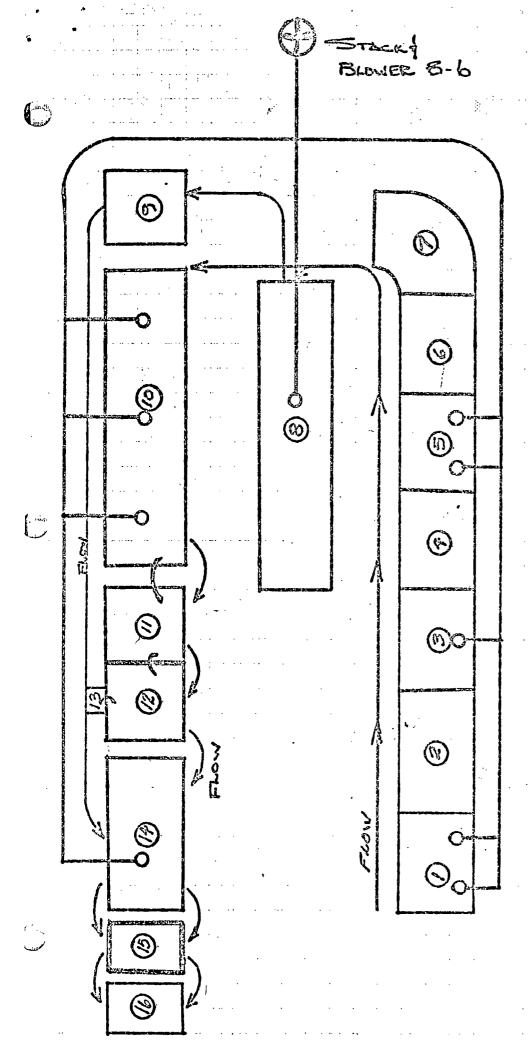
cc: R. G. Douds

G. L. Rucker

D. L. Roberts

P. L. Wyche

M. A. Clark



DELECTRO CLEAN PENWOLF K& Hor WATER RAVSE Sulfueic Acid (Hesog) COLD WATER PUPSE ELECTRO CLEAN PENWALT K4 HOT WATER RINGE COLD WATER PIUSE 8) Wester Durk MickLE PLATE COLD WATER RIUSE TIN PLATE- FOTASSIUM STENNETE (LIKOLINE) TIN SOLUTION RECOVERY TIN SOLUTION RECOVERY FEED WATER RECOVERY HOT WATER RINSE HOT WATER RINSE DRYER-STEAM FED

PROCESS No. A

DEPT B-14

NICKLE OF TIN PLATE

RACK PROCESS

CLESNING & PICKLING

Temiso No. 03/70/01/0182 STACKS AND OTHER ECRESS POINTS

WESTINGHOUSE ELECTRIC CORP.	Person to Contact M. L. EMMENS
2/6 Fact Fourth Street	Mailing Address Same
MANSFIELD RICHLAND 44902	Street
City, Village or Township County Zip	City State . Zip
	Telephone 419 - 755-6232
Type: & Round) (L & W or Diam.) 40" DIA.
Height: Above roof 6 ft. Above ground	42
Exit gas: Temp. 80 °F. Volume 16,000 ACFM	Velocity 1825 feet per minute
Continuous monitoring equipment: Yes No. If ye	11.2
Manufacturer Make or model	Pollutant.
Draw a flow diagram in plan view of the source equipme or control device discharges into this stack show all	ent, control equipment and stacks. If more than one source
or control device discharges and this stack show all	·
STACK R6	
PROCESS #4 DEPT C-14	
	
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ortant Note: If emissions from the above stack have been determined by performance testing or other means, include such data and supporting calculations with this data sheet.

CEFTICIAL USE BNLY	APi	PLICATI	ion for permit		•
raise No/	-	P	ROCESS	•	
Facility Name WESTINGHOUS	E ELECTRIC	CORP.	Person to Contact .	M. TIDMORE	
ility Address 246 East	Fourth Stre		. Mailing Address	Same	
MANSETELD	Street RICHLAND	44902		Stree	!
City, Village or Township	County	Zip	City	State	Zip
		•	Telephone 419	- 755-6232	· · ·
			Area Code	•	Kuabe
This application is submitted					•
Permit to operate an e			on evicting rounce		•
ExVariance from regulation					•
Check-list of information to					
Plans and drawings	• •		ests or calculations	XX Process flo	w diaeram
Compliance time schedu	le 🗀 Co	nstruction	on schedule	☐ Additional	_
Name of processCLEAN -	ETCH - NIC	KLE OR	TIN PLATE	Year instal	10/0
Product of this process	PLATED COME	CONENTS	- RANGE & LAUNDRY		
Process equipment			Your identifica	tion	
Manufacturer F. B. STE			. Nake or model _		
Capacities (lbs/hr): Rated1	60 . Na	ximum 25	0		•
·	•	A1175 425	The Third and the Table 1		
•		OPERATI	ING INFORMATION	•	•
Normal operating schedule: hrs	. /day 8	dave/wb	5 . whe for 49		
Percent annual production (fir	vished units)	hy seaso	on: Winter 25 Spr	ing25 Summer	25 Fall 25
Percent annual production (fir Hourly production rates (lbs):	Average 16	50	Maximum 250		*
Annual production (indicate un	its) 322,65	50	_	•	•
iected percent annual incre	ase in produ	ction	7% .	•	
Method of exhaust ventilation:		Window f	an 🛘 Roof vent 🗖 0	ther, describe	
Type of process: Continuous				•	
If batch, minutes per cycle				• .	•
Does process involve any of the				ad 🛘 Asbestos 🗀	Beryllium Mercury
Materials used in process (inc	lude organic	material	s) [.]		•
List of Raw				 	Amount
Materials			Principal Use		(lbs./hr.)
PENNWALT CLEANER K4		MING			2.5
SULFURIC ACID .			ST - PH CONTROL	, 	0,93
POTASSIUM STANNATE		PLATE			0.21
POTASSIUM HYDROXIDE		PLATE			0.92
HYDROGEN PEROXIDE		PLATE		····	1.6
NICKLE SULFATE		LE PLAT	عديد والمستهين والشراق المراجعة فالمستوان المراجعة المستوان المراجعة والمستوان المستوان المستوان والمستوان والم		0.13
NICKLE CHLORIDE BORIC ACID		LE PLAT		· · · · · · · · · · · · · · · · · · ·	0.06
UDYLITE BRIGHTENER NO. 22		LE PLATI			0.02
ON LATIN BRIGHTHAM NOT RE	1,100	au a LET L	"		J.03
			•	· · · · · · · · · · · · · · · · · · ·	
		·	· · · · · · · · · · · · · · · · · · ·		

This application must include a detailed process flow diagram. Show entry and exit points of all raw materials, intermediate products, by-products and finished products. Label all materials including airborne contaminants and other waste materials.

Important Note: If emissions from this source have been determined by source tests, material balances or emission factors, include such data and supporting calculations with application.

- VARIANCE PERMIT COMPLIANCE TIME SCHEDULE -

The following COMPLIANCE TIME SCHEDULE is a part of the permit application for.

Company I.D. *: PROCESS #4

Description *: NICKEL OR TIN PLATE

*Note: These must be identical to those on the PACN.

(describe source equipment)

Located at the:

Facility Name: WESTINGHOUSE ELECTRIC CORP.

Person to Contact:

246 East Fourth Street

M. W. Tidmore, Manager

Facility Address: Mansfield, Ohio 44902

PLANT ENGINEERING

This Time Schedule applies to compliance with Regulation(s) EP-11-11

(indicates facility name and location)

Indicated below are the steps, or milestones, which will be taken by the above air contaminant source and the time required (in months) to complete each step as well as the time required for the total program. This COMPLIANCE TIME SCHEDULE will become a condition of the variance permit upon approval.

ESTONE	Beginning Date 6/30/74	Accumulative MONTHS	Period DATE
1	Submission of final control plans to Ohio EPA for source	2	9/1/74
2	Awarding of contracts for emission control system or issuing of purchase orders for component parts to accomplish emission control or process modification		12/1/74
3	Initiation of on-site construction or installation of emission control equipment or process modification		2/1/75
14	Completion of on-site construction or installation of emission control equipment or process modification	10	5/1/75
5.	Achievement of final compliance with all applicable State and Federal rules and regulations	12 .	7/1/75

BRIEFING MEMO

1.	Company Name White-Wes	stinghouse Corp.	3. Application No.	ОН 0004600
2.	Company Address 246 Ea	st Fourth Street	SIC No. 3631, 3	633
•	Mansfi	eld, Ohio 44902	District Northwe	st (Richland County)
	I	Description of Op	eration	
. 4.	Products Made Ranges,	Clothes Washers, Clo	thes Dryers	
4.	a.Raw Materials Ste	el		
5.	Daily Production Rate	1,295 Ranges; 2,12	20 Laundry Equipment	
5.	a.Raw Material Consumpt	zion <u>NA</u>		
6.	Processes Used Nickel	, Chromium Plating (1	Non-Cyanide, 15672 sq. i	ft. plated)
7.	Waste Volume NA			-
8.	Treatment System Used_	Chemical Treatment,	None	None
	(Process/cooling) ~~	Clarification		
	Outfalls (No. 001, etc	c) 001 - Process	002 - Process	003 - Process
30.	Outfall Volumes (MGD)	0.513	0.900	0.026
11.	Receiving Stream Ro	cky Fork	Rocky Fork	Rocky Fork
12.	Critical flow of above	0,60 cfs		
	a. Stream Classificatio and agricultural water s			
13;	Subsequent Network M	ohican River, Walhond	ing River, Muskingum Ri	iver, Ohio River
14.	No. of employees 3,20	Hours per day	shifts/w	/k10
	wks/yr50	<u> </u>		
	Regulat	ory Bases (Check	where applicable)	
`15.	In 303 Basin No	Outs	ide 303 Basin	Yes
	WQ Segment Yo	es EL S	egment	. No .
•	Mahoning No	ORSA	NCO	No.
-	I.J.C. No	Othe	r	No 1
٠	Federal Guideline Used	Electroplating (P	roposed 4/24/75)	
	A fact sheet is necessary year. Al Necessary	when the outfall vol not necessar		r any day of the

<i>).</i> •		•	·
•			
8.	Treatment System Used None	None	None
9.	(Process/cooling) Outfalls (No. 001, etc) 004 - Process	005 - Process	006 - Storm
10.	Outfall Volumes (MGD) 0.008	0.024	
11.	Receiving Stream Rocky Fork	Rocky Fork	Rocky Fork

c

8.	Treatment System Used None	None	None
9.	(Process/cooling) Outfalls (No. 001, etc) 007 - Storm	008 - Storm	009 - Storm
10.	Outfall Volumes (MGD)		
11.	Receiving Stream Rocky Fork	Rocky Fork	Rocky Fork

• .

DATE: 07/09/86

DMR-QA STUDY NUMBER 006

PERMITTEE: 0H0004600 i	MANSFIELD	PRODUCT	CX 0H0002852		
			ACCEPTANCE LIMITS	WARNING LIMITS	
TRACE METALS IN ME	CCROGRAMS	PER LIT	ER:	,	
CHROMIUM	620	686	534:- 826.	571 790.	ACCEPTABLE
COPPER	765	749	657 830.	679 809.	ACCEPTABLE
NICKEL	922	911	7911030.	8211000.	ACCEPTABLE
MISCELLANEOUS ANAI	LYTES:				
PH-UNITS	4.50	4.50	4.38- 4.59	4.41- 4.56	ACCEPTABLE
TOTAL SUSPENDED SOLIDS	66.0	65.2	50.8- 69.2	53.1- 66.9	ACCEPTABLE
ADDITIONAL MISCELI	LANEOUS AN	HALYTES:		-	•
TOTAL CYANIDE (IN MG/L)	0.656	0.600	.343807	.401748	ACCEPTABLE

PAGE 1 (LAST PAGE)

7. List of Applicable Source(s) Involved in the Draft Variance Program and their Associated Emission Data:

OEPA Source No.	Source Description	Type of Source (Variance or Offset)	(a) Actual Emission Rate 1bs/hr, tons/yr	(b) Current SIP Limitation lbs/hr, tons/yr	(c) Hore Stringent of (a) and (b) lbs/hr, tons/yr	(d) Committed Variance/Offset 1bs/hr, tons/yr	(e) Variance Source (d) - (c) lbs/hr, tons/yr	(f) Offset Source (d) - (c) lbs/hr, tons/yr
K002	2nd Floor	Offset	12.9 tons/yr	14.3 tons/yr	12.9 tons/yr	16.9 tons/yr	At	4.0 tons/yr
	Primer		41.0 Kg/day	45.4 Kg/day	41.0 Kg/day	53.7 Kg/day		12.7 Kg/day
	Flowcoat							
K003	3rd Floor	Variance	7.5 tons/yr	5.2 tons/yr	5.2 tons/yr	7.5 tons/yr	2.3 tons/yr	
	Electrost	atic	23.8 Kg/day	16.5 Kg/day	16.5 Kg/day	23.8 Kg/day	7.3 Kg/day	
	Spray							
K002/	Coating	Total	20.4 tons/yr	19.5 tons/yr	18.1 tons/yr	24,4 tons/yr		
K005	Lines		64.8 Kg/day	61.9 Kg/day	57.5 Kg/day	77.5 Kg/day		<u> </u>
		.						
TOTALS							2.3 tons/yr	4.0 tons/yr
;	* - Include	es transfer effic	eiency credit				Offset Ratio (f	1.7

RACT Equivalence Calculations for Sources K002 and K005 at Mansfield Products Company, Mansfield, Ohio (1)

	1	1_	_			Lb VOC/Gal	Solids (f)			Emitted (h)
Source	VOC content (lb/gal-water) (a)		Percent Solvent (c)	Percent Water (d)	Coating Consumed (e)	Without TE Credit	With TE Credit	Gal Solids consumed (g)	without	with TE Credit
	(4)	1.5/		1	\ <u>.</u>	TE CIECIT	TE CTEUTE	(9/	IL CIEGIC	11. 07 6010
Actual Emission										
K002	2.62	27.8	15.0	57.2	23,014	4.03	-	6,398	12.9	-
K005	3.45	53.0	47.0	-0-	4,346	6.51	-	2,303	7.5	-
Total									20.4	
Allowable Emissions			1						}	
K002	2.80/3.43 (2)					4.47	5.28	6,398	14.3	16.9
K005	2.80 (3)					4.52	-	2,303	<u>5.2</u>	5.2
Total									19.5	22.1
		-								

Notes

- (1) See step-by-step calculations following this table.
- (2) Second figure is the equivalent emission limit based on an 85% transfer efficiency for a flowcoating operation.
- (3) RACT emission limit based on 60% transfer efficiency for hand-held electrostatic spray guns.

MANSFIELD PRODUCTS COMPANY

INDUSTRIAL WASTE TREATMENT PLANT

DIVISION OF WHITE-WESTINGHOUSE CORPORATION

BASIC DESIGN DATA

Waste Treatment Process

Treatment consists of batch reduction of chromic rinse waste.

Reduced chromic rinse waste and all acid-alkali waste streams and rinses are equalized, precipitated by lime-polymer coagulation for the removal of suspended solids, phosphates and metallic hydroxides followed by final pH adjustment. Solids are removed from the clarifiers to a sludge well followed by vacuum filtration for dewatering prior to ultimate disposal in a landfill.

Design Flow

Average - gpm	0.612 mgd
Peak - gpm	1.224 mgd

Treatment Units

1. Batch Tanks	
Chrome Tank (Existing)	
Number	1
Volume - Gallons	7,300
Mixer - Number and Size	1 @ 7.5 hp
Acid Tank (Existing)	
Number	1
Volume - Gallons	10,700
Pumps (Existing)	
Number	2
Capacity, each, gpm	30
Hp, each	3
2. Surge-Mix Tank (Existing)	٠.
Number	1
Volume - Gallons	12,100
Mixer - Number and Size	1 @ 10 hp

3.	Equalization Tank Influent Pumps (Existing) Number Capacity, each, gpm Hp, each	3 425 15
4.	Equalization Tank (Existing Stand-by Flocculation Clarifier) Number Volume - Gallons	1 122,230
	Provide protective coating on existing steel tank and clarifier mechanism and air mixing of tank contents.	
5.	Clarifier Influent Pumps Number Capacity, each, gpm Hp, each	2 425 15
6.	Number Dimensions - Feet	2
	Tank Diameter SWD	40 13
	Reaction Zone Diameter W.D.	12 11
	Flocculation Zone Diameter W.D. Surface Area, sq ft, each	16 10 1,056
	Surface Alea, sq it, each Surface Rate, gpm/sq ft @ 425 gpm, avg flow @ 850 gpm, peak flow	0.4
	Volume, cu ^c t, each Reaction Flocculation Zone Clarification	15,035 122,230
	Detention Time, Hrs, @ 425 gpm avg flow Reaction Flocculation Zone Clarification	0.6 4.8
7.	Final pH Adjustment Tank Number Volume - Gallons Detention Time, Min, @ 425 gpm	1 4,500 10
8.	Effluent Parshall Flume (Existing) Throat Width, inches	. 6
	Flow Range, gpm Minimum Maximum	21 1,750

8. Sludge Handling (Existing) Sludge Well Number Volume - Gallons 3,600 Sludge Pumps 2 Number 30 Capacity, each, gpm 2 Hp, each Vacuum Filters Number 6 Diameter - Feet 6. Face Width - Feet 112 Filter Area - Sq Ft 13 Filter Loading, gph/sq ft 24 Operating Time, hrs Filter Feed Capacity @ 0.75% 2,200 lb/day 35,000 gpd

Note: Precoat vacuum filter operation complete with precoat mix tank and slurry pump.

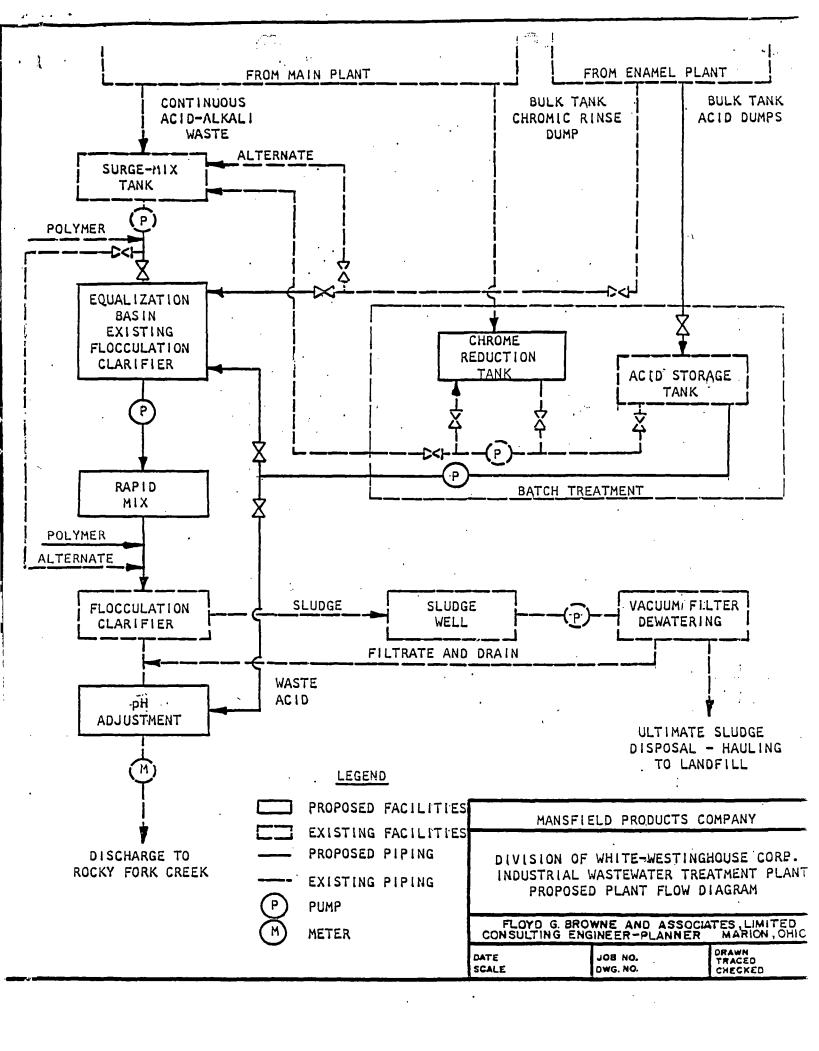
Chemical Feed (Existing)

Lime Feed Range 12.5-250 lb/hr
lime feed system consists of bag
loading hopper, volumetric feeder,
dissolving tank with mixer, lime
slurry pump, and proportioning
weir tank.

Polymer Feed Capacity, Max @ 1% feed solution 3 lb/hr
Polymer feed system consists of a 200-gallon combined aging and feed tank and a 36-gph variable speed feed pump.

10. Chemical Feed

Add acid feed pumps for final pH adjustment and flow equalization tank pH adjustment.



Coatings and Resins

March 1, 1985

Mr. Bob Corbett
Mansfield Products
246 East Fourth Street
Mansfield, Ohio 44902

Dear Bob:

Below are the solvent percentages (by weight) as supplied to you for the products you used in 1984.

HIGH SOLIDS

WIGH SOFTER					
	AG452W1519 (White)	AG452D1520 (Almond)	AG452Y1523 (Harvest)	AG452C1521 (Coffee)	AG452A1522 (Avocado)
Xylol	62.3	62.1	52.8	58.7	51.5
Toluol	6.8	5.1	7.3	6.1	7.2
Butanol	10.4	9.3	15.9		15.7
Isopropanol	1.7	1.6	1.2	1.1	1.2
Solvesso 100	9.7	8.9	8.5	2.4	15.1
Isopar E	2.4	3.2	3.7	2.2	2.5
Heptane	5.7	7.4	8.6	5.2	5.7
Espesol 286	0.2			0.2	0.2
Butyl Acetate	0.5	0.7	0.8	0.5	0.5
PM Acetate		1.1	0.5	90 min or 400	
Diacetone Alcohol				23.2	
Misc. Solvents	0.3	0.6	0.7	0.4	0.4
	100.0	100.0	100.0	100.0	100.0

Mansfield Products Company March 1, 1985 Page Two

DURACRON

	AG129W1 (101.21) (White)	AG129D1047 (Almond)	AG129H1045 (Harvest)	AG129C1048 (Coffee)	AG129A1046 (Avocado)
Xylo1	38.2	38.4	32.4	28.3	33.2
Toluol	35.6	36.8	39.0	40.7	41.5
Butanol	5.7	6.0	6.6	11.8	7.0
Isobutanol	4.0	1.3	7,2	2.2	6.2
Solvesso 100	8.9	11.7	8.7	9.5	9.4
Cellosolve Acetate	0.2	0.2	0.3	0.3	0.3
Butyl Carbitol	4.9	3.4	3.5	3.4	
MEK	2.4	2.1	2.2	3.7	2.3
Misc. Solvents	0.1	0.1	0.1	0.1	0.1
	100.0	100.0	100.0	100.0	100.0

WATER	REDUCIBLE	PRIMER
-------	-----------	--------

•	AG158G1281 (Gray W/R)	Gray W/R C	ont:
Water	73.3	2-ethyl hexanol	8.2
Dimethyl Ethanol Amine	2.0	Pine Oil	1.0
Butyl Carbitol	4.8	Misc. Solvents	0.1
Butanol	3.3		100.0
Methyl Carbitol	4.8		
Texanol	1.0		•
Butyl Cellosolve	1.5		

Mansfield Products Company March 1, 1985 Page Three

Please be reminded that the above solvent information is considered proprietary and should not be disclosed to any third parties other than the EPA.

If you have any questions, feel free to call.

Sincerely,

Freehold to June 14

Michael L. Sproule Technical Manager - Appliance Finishes MLS/kar

cc: R. G. Douds

G. L. Rucker

D. L. Roberts

P. L. Wyche

M. A. Clark

	والمتعارف والمتحار والمتحار والمحارب والمتحار المتحار المتحار والمتحار والمتحار والمتحار والمتحار والمتحار والمتحار	•
1.	BUSINESS LICENCE NAME OF CORPORATION. COMPANY OR INDIVIDUAL OWNER:	
	MANSFIELD PRODUCTS COMPANY	
2.	PLANT ADDRESS WHERE COATING OPERATION IS LOCATED:	
	246 E. Fourth St., Mansfield, OH 44902	}
3.	SOURCE DESCRIPTION (INCLUDING POLLUTION CONTROLS):	·
	KOO1 2nd Floor 4-Loop Electrostatic Disc	
4.	SOURCE CLASSIFICATION (PAPER COATER, METAL FURNITURE, ETC.):	
	MAJOR APPLIANCE (WASHERS & DRYERS)	
5.	COATING EQUIPMENT MANUFACTURER AND MODEL NUMBER:	
	Ransburg Electrostatic 3600 RPM Deep Well Discs	
6.	METHOD OF APPLICATION:	
	SPRAY: DIP COAT	
,	AIR ATCHIZATION FLOW COAT	
	HOT AIRLESS 'ELECTRO COAT	
	OTHER (IDENTIFY)	
7.	BOOTH TYPE:	
	BCOTH AFLOOR DRAFT口 WALL. DRAFT选 OTHER口 . CONVEYORIZED 凸	
	BOOTH BFLOOR DRAFT WALL DRAFT OTHER O . CONVEYORIZED T	
	BOOTH CFLOOR DRAFT口 WALL BRAFT区 OTHER口 . CONVEYORIZED 点	
	BOOTH OFLOOR DRAFT WALL DRAFT OTHER OF CONVEYORIZED CX	
8.	DISPOSITION OF COATED ITEMS:	
	AIR DRY OVEN BAKE OTHER	
	TIME SETWEEN COATING AND SAKING 25 Min.	
	DRY OR BAKE TIME AND TEMP 20 Min. 350°F.	
9.	OPERATICHAL DATA:	
	TYPE OF ARTICLE COATED Metal - Flat Ware OPERATING SCHEDULE	
	OPERATING SCHEDULEHOURS/DAYLOJ DAYS/YEARLAJ 233	
r ea	CH COATING PROVICE: (Attached) 11. FOR EACH THINNER PROVIDE:	(Attached
	ype Of Coating: Identification No.:	• .
×	anufacturer: Kanufacturer:	
I	dentification Ho.: Annual Usage:	,

Annual Usage:

Weight Fer Gal. :

Weight Percent Salids;

Chemical Composition Of Volatiles: (Chemical Numes, indicate if Mt. Or Vol. Percent)

Solvent Thinner Ratio: (Gal.Thinner/Gal. Coating)

Chemical Composition:
(Indicate if Wt. Or Yol. Percent)

		~									
	10.		•	K-001 - 2	nd FLOOR 4-1	OOP ELECTROS	TATIC DISC				ACB-26'
	SOURCE DESCRIPTION	UNITE DURACRON	ALMOND DURACRON	HARVEST WHEAT DURACRON	AVOCADO DURACROM	COFFEE	LRITE POLYCRON	ALHOND POLYCRON	HARVEST WIEAT POLYCRON	AVOCADO POLYCRON	COFFEE POLYCRON
٠	COATING TYPE OF COATING HANUFACTURER IDENTIFICATION NO.	Finish PPG AG129W1 101.21	FINISH PPG AG129D1047	Finish PPG AG129H1045	FINISN PPG AG129A1046	FINISH PPG AG129C1048	Finish PPG AG452W1319	Finish PPG AG452D1520	FINISH PPG AG452Y1523	PINISH PPG AG452A1522	Finish PPG AG452C1521
٠	ANNUAL USAGE WEIGHT PERCENT SOLIDS REC USED WEIGHT PER GALLON	3,850	2113 53.8 45.0 9.31	0 53.5 45.1 9.23	0 51.1 42.8 8.73	0 51.1 41.8 8.64	13,123 76.3 68.6 11.85	6,896 76.3 68.6 11.69	1,074 73.4 65.5 10.51	255 73.6 65.2 10.60	226 71.0 62.9 9.67
					-				-		
	CHEHICAL COMPOSITION OF THE CHEHICAL NAMES - DURACRO		AG129W1 (101.21) WHITE	AG129D1047 ALHOND	AG129H1045 HARVEST	AG129C1048 COFFEE	AG129A1046 AVOCADO				
	I BY WEIGHT	Xylol	38.2	• 38.4	32.4	28.3	33.2				
		Toluci	35.6	36.8	39.0	40.7	41.5				
		Butanol	5.7	6.0	6.6	11.8	7.0			•	
	•	Isobutanol	4.0	1.3	7.2	2.2	6.2		-	•	
	· s	olvesso 100	8.9	11.7	8.7	9.5	9.4				
	·	Cellosolve Acetate	0.2	0.2	6.3	0.3	0.3				
		Butyl Carbitol	4.9	3.4	3.5	3.4					
		HEK	2.4	2.1	2.2	3.7	2.3			•	
	H	ec.Solventa	100.0	$\frac{0.1}{100.0}$	0.1 100.0	0.1	0.1				
	HICH SOLI	DS POLYCRON	AG452W1519 WILTE	AG452D1520 ALMOND	AG452Y1523 HARVEST	AG452C1521 COFFEE	AG452A1522 AVOCADO				
	•	Rylol	62.3	62.1	52.8	58.7	51.5				
		Toluol	6.8	5.1	7.3	6.1	7.2				,
		Butanol	10.4	9.3	15.9	-	15.7				
		Laopropanol	1.7	1.6	1.2	1.1	1.2				
		Solvesso 100	9.7	8.9	8.5	2.4	15.1				
		Isopar E	2.4	3.2	3.7	2.2	2.5				
		Meptane	5.7	7.4	8.6	5.2	5.7				•
		Espesol 286	0.2		***	0.2	0.2				
	· · · · · · · · ·	Butyl Acetate	0.5	0.7	0.8	0.5	0.5				
	•	PM Acetate		-1.1	0.5		e===				
		Diacetone Alcohol				23.2	* *		٠	Rev. 4/12/	15
										CATA ALTERIA	

Hisc.Solvente

0.3

100 0

0.7

0.4

Rev. 4/12/85 ...Continued



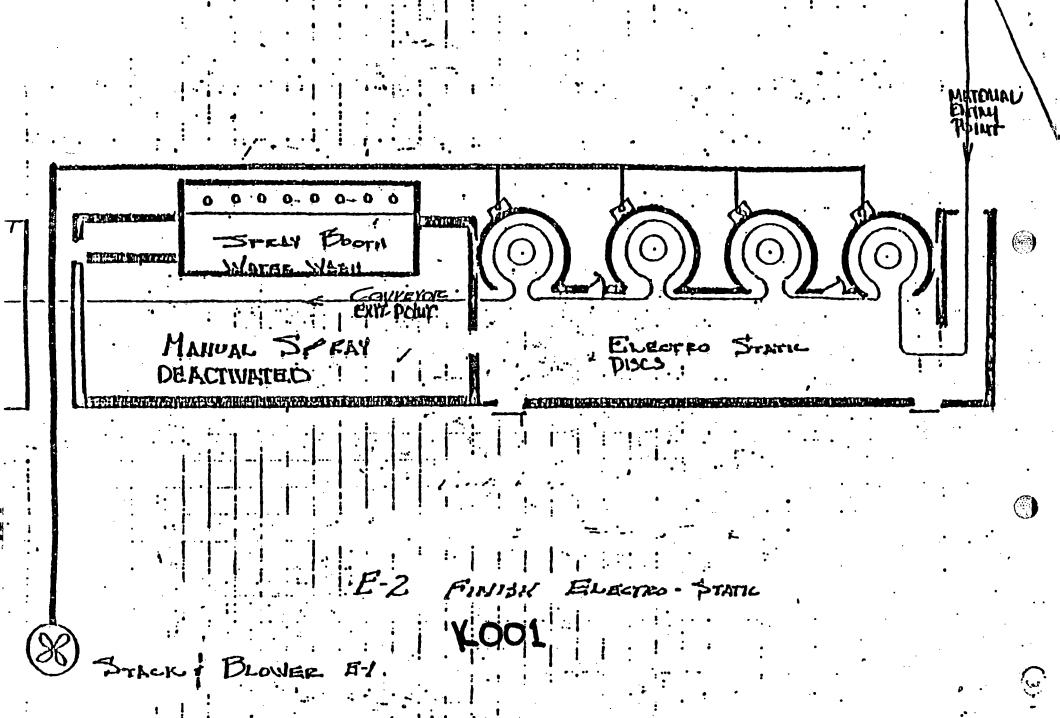
SOLVENT THINNER RATIO

GAL. SOLVENT/GAL. COATING

WHITE DURACRON 1/1.92	ALMOND DURACRON 1/1.73	HARVEST WHEAT DURACRON 1/1.73	AVOCADO DURACRON 1/1.65	COFFEE DURACRON 1/1.62
WHITE POLYCRON	ALMOND POLYCRON 1/2.13	HARVEST WHEAT POLYCRON 1/2.13	AVOCADO POLYCRON 1/2.13	COFFEE POLYCRON 1/2.13

11. KOO1 - 2ND FLOOR 4-LOOP ELECTROSTATIC DISC

SOLVENT THINNER ANNUAL USAGE	
DI-ACETONE ALCOHOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	441 GALLONS
XYLOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	9390 GALLONS
TOLUOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	1338 GALLONS
BUTYL-CARBITOL VAN WATERS & ROGERS CUYAHOGA HEIGHTS, OHIO	806 GALLONS



SURFACE COATING SURMARY

One Copy Or This Form Must Be Filled Out For Each Coating Line

			_			
1. BUSINESS LICENCE MAME OF CORPORATION, COMPANY OR INDIVIDUAL OWNER:						
MANSFIELD PRODUCTS COMPANY						
2.	PLANT ADDRESS WHERE COATING OPERATION IS	LOCATED:	·			
	246 E. FOURTH ST., MANSFIE	LD. OH 44902				
3.	SOURCE DESCRIPTION (INCLUDING POLLUTION					
	VOOT - 2ND FLOOR FLECTROST	ATIC HAND GUN TOUCH-UP & OVEN	·			
4.	SOURCE CLASSIFICATION (PAPER COATER, ME	tial found tune, etc. J:				
	MAJOR APPLIANCE (WASHERS &	DRYERS)				
5.	COATING EQUIPMENT MANUFACTURER AND MODEL	. HUMBER:				
	NORDSON AN-8 ELECTROSTATIC	HAND GUNS				
6.	METHOD OF APPLICATION:					
	SPRAY:	DIP COAT				
	AIR ATCHTEATION	FLOW COAT				
	HOT ATRLESS	'ELECTRO COAT				
	ELECTROSTATICAIRED BISCOS OTHER (IDENTIFY)D	ROLL COAT I NUMBER OF COATING STATIONS 2				
7.	BOOTH TYPE:					
	BOOTH AFLOOR DRAFT WALL CRAFT 图	T OTHER口 。CONVEYORIZED 首				
	BOOTH BFLCOR DRAFT WALL DRAFT	OTHER . CONVEYORIZED [
	BOOTH CFLOOR BRAFT WALL CRAFT	OTRERO . CONVEYORIZED O				
•	BOOTH DFLOOR DRAFT NALL DRAFT	T OTHER . CONVEYORIZED . CRAHTO				
8.	DISPOSITION OF COATED ITEMS:					
	AIR DRY O GYEN SAKE X 01	THER 🗀 .				
	TIME BETWEEN COATING AND BAKING	20 MIN.				
	DRY OR BAKE TIME AND TEMP	20 MIN. 350°F.				
9.	OPERATICHAL DATA:					
	TYPE OF ARTICLE COATED METAL					
	OPERATENG SCHEDULE8NOURS/CAY	X DAYS/YEAR X 235	·			
	· / A PRITE A CT STOP)		·			
r eac	R COATING PROVICE: (ATTACHED)	11. FOR EACH THINNER PROVIDE:	(ATTACHED)			
T	pe Of Coating:	Identification No.:				
•	Manufacturer: Kanufacturer:					
	Identification No.: Annual Usage:					
	inual Usage:	Chemical Composition: (Indicate if Wt. 0				
	right fer Gal. :					
	right Percent Salids;					
C)	memical Composition Of Volatiles: (Chemical Mames, Indicate If Wt. Or Yol	. Percent)				

Solvent Thinner Patio: (Gal. Thinner/Gal. Coating)

- 61	CO	-2	ю

		KUU 1 - 141	FLUUR ELECT	ROSTATIC HAN	D GUN TOUCH-	UP & OVEN				ACD-26
SOURCE DESCRIPTION	MILTE DURACRON	ALMOND DURACION	HARVEST MIEAT DURACRON	AVOCADO DURACRON	COFFEE DURACRON	MILTE POLYCRON	ALEKOND POLYCRON	HARVEST WHEAT POLYCRON	AVOCADO POLYCRON	COFFEE PULYCRON
COATING TYPE OF COATING HANDFACTURER IDENTIFICATION NO.	FINISH PPG AG129W1 101.21	Pinish PPG AG129D1047	Finish PPG AG129H1045	Finish PPG AG129A1046	FINISH PPG AG129C1048	Fintsh PPG AC452W1519	Pinish PPG AC452D1520	finisu PPG AG452Y1523	Pinish PPG AG452A1522	Penesu PPG AG452G1521
ANNUAL USAGE WEICHT PERCENT SOLI	219 DS REC 57.8 USED 49.5	121 53.8 45.0	5.5 53.5 45.1	29 51.1 42.8	0 51.1 41.8	7503 68.6	76.3 68.6	63.4 65.5	15 73.4 65.2	12.0 62.9
WEIGHT PER CALLON CHEMICAL COMPOSITION CHEMICAL NAMES - DU		9.31 AG129W1 (101.21) WHITE	9.23 AG129D1047 ALHOND	8.73 AG129H1045 HARVEST	8.64 AG129C104B COFFEE	11.85 AG129A1046 AVOCADO	11.69	10.51	10.60	9.67
2 BY WEIGHT	Xylol	38.2	38.4	32.4	28.3	33.2				
	Toluci	35.6	36.8	39.0	40.7	41.5		•		
	Butanol	5.7	6.0	6.6	11.8	7.0				
	Isobutanol	4.0	1.3	7.2	2.2	6.2				
	Solvesso 100	8.9	11.7	8.7	9.5	9.4				
	Cellosolve Acetate	0.2	0.2	0.3	0.3	0.3				•
	Butyl Carbitol	4.9	.3.4	3.5	3.4				-	
	. MEK	2.4	2.1	2.2	3.7	2.3			••	
	Misc.Solvents •	100.0	0.1	0.1 100.0	$\frac{0.1}{100.0}$	0.1 100.0				
<u>jiī c</u>	I SOLIDS POLYCRON	AG452W1519 WILLTE	AG452D1520 ALMOND	AG452Y1523 HARVEST	AG452C1521 COPPEE	AG452A1522 AVOCADO				
	Kylal	62.3	62,1	52.8	58.7	51.5				
	Toluci	6.8	5.1	7.3	6.1	7.2				
	Butacol	10.4	9.3	15.9	***	15.7				
	Isopropanol	1.7	1,6	1.2	1.1	-1.2				
	Solvesco 100	9.7	8.9	8.5	2.4	15.1				
•	leopar E	2.4	3.2	3.7	2.2	2.5	. •			
	lleptan a	5.7	7.4	4. 6	5.2	5.7				
	Espesol 286	0.2			0.2	0.2				
	Butyl Acotate	0.5	0.7	0.8	Q.5	0.5	•			
	PH Acetate		1.1	0.5						
·	Diacetone Alcohol				23.2				Rev.4/12	/85
	Hisc. Solvents	100.0	0.6 100 0	0.7 100 0	100.0	0.4			·Conti	ทแอส์

10. KOO1 - 2nd FLOOR ELECTROSTATIC HAND GUN TOUCH-UP & OVEN

SOLVENT THINNER RATIO

GAL. SOLVENT/GAL. COATING

WHITE DURACRON 1/1.92	ALMOND DURACRON 1/1.73	HARVEST WHEAT DURACRON 1/1.73	AVOCADO DURACRON 1/1.65	COFFEE DURACRON 1/1.62
WHITE POLYCRON 1/2.13	ALMOND POLYCRON 1/2.13	HARVEST WHEAT POLYCRON 1/2.13	AVOCADO POLYCRON 1/2.13	COFFEE POLYCRON 1/2.13

11. KOO1 - 2ND FLOOR ELECTROSTATIC HANDGUN TOUCH-UP & OVEN

SOLVENT THINNER ANNUAL USAGE	
DI-ACETONE ALCOHOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	25 GALLONS
XYLOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	537 GALLONS
TOLUOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	76 GALLONS
BUTYL-CARBITOL VAN WATERS & ROGERS CUYAHOGA HEIGHTS, OHIO	46 GALLONS

esteroperational financial problems Diever. TAET A

SURFACE COATING SURMARY



One Copy Of This Form Must Se Filled Out For Each Coating Line

1.	BUSINESS LICENCE NAME OF CORPORATION, CO	CMPANY OR INDIVIOUAL CHNER:].	
	MANSFIELD PRODUCTS COMPANY	•		
2.	PLANT ADDRESS WHERE COATING OPERATION 1	S LOCATED:		
	246 E. Fourth St., Mansfie	ld, OH 44902		
3.	SOURCE DESCRIPTION (INCLUDING POLLUTION	N CONTROLS):		
	K002 2nd Floor Wate	rborne Primer & Oven		
4.	SOURCE CLASSIFICATION (PAPER COATER, M	ETAL FURNITURE, ETC.):		
	Major Appliance (Washers &	Dryers)		
5.	COATING EQUIPMENT MANUFACTURER AND MODEL	L NUMBER:		
	Spra-Con Flo-Coater and Sp	ra-Con Oven		
6.	METHOD OF APPLICATION:		İ	
	SPRAY:	DIP COAT		
	AIR ATGNIZATION	FLOW COATDK		
	HOT AIRLESS	'ELECTRO COAT []		
	OTHER (IDENTIFY)	ROLL COAT NUMBER OF COATING STATIONS [1]		
7.	BCOTH TYPE:			
	BOOTH AFLOOR DRAFT WALL GRAFTE	KOTHER . CONVEYORIZED	•	
	BOOTH BFLCOR DRAFT WALL DRAFT	OTHER . CONVEYORIZED .	}	
	BOOTH CFLOOR DRAFT[] WALL GRAFT[OTHER ; CONVEYOREZED [
	BOOTH DFLOOR BRAFT WALL BRAFT	OTHER . CONVEYORIZED		
8.	DISPOSITION OF COATED ITEMS:	_		
		THER	·	
	TIME BETWEEN COATING AND BAKING	_		
•	DRY OR BAKE TIME AND TEMP	20 min. 350°F.		
9.	OPERATICNAL DATA:			
		- Flat Ware		
	OPERATING SCHEDULE	X DAYS/YEAR 235		
2 7 10	CATING PROVICE: (Attached)	11. FOR EACH THINNER PROVIDE:	(Attached)	
	me Of Coating:	Identification No.:	,	
Hanufacturer: Hanufacturer:				
Identification Ho.: Annual Usage:				
Annual Usage: Chemical Composition:				
¥e	ight Per Gal. :	(Indicate If Wt. C		
¥e	ight Percent Solids;	•		
CI	emical Composition Of Volatiles: (Chemical Number, Indicate if Mt. Or Vol	. Percent 1		

Solvent Thinner Ratio: (Gal.Thinner/Gal. Coating) 10. TYPE OF COATING
MANUFACTURER
IDENTIFICATION NO.
ANNUAL USAGE
WEIGHT PER GALLON
WEIGHT PERCENT SOLIDS

Waterborne Primer
Pittsburgh Plate Glass, Delaware, OH (PPG)
AG158G1281
23,014 Gallons
9.7# as received
45% as received; 36% as used (This is with 52.5%

CHEMICAL COMPOSITION OF VOLATILES BY WEIGHT:

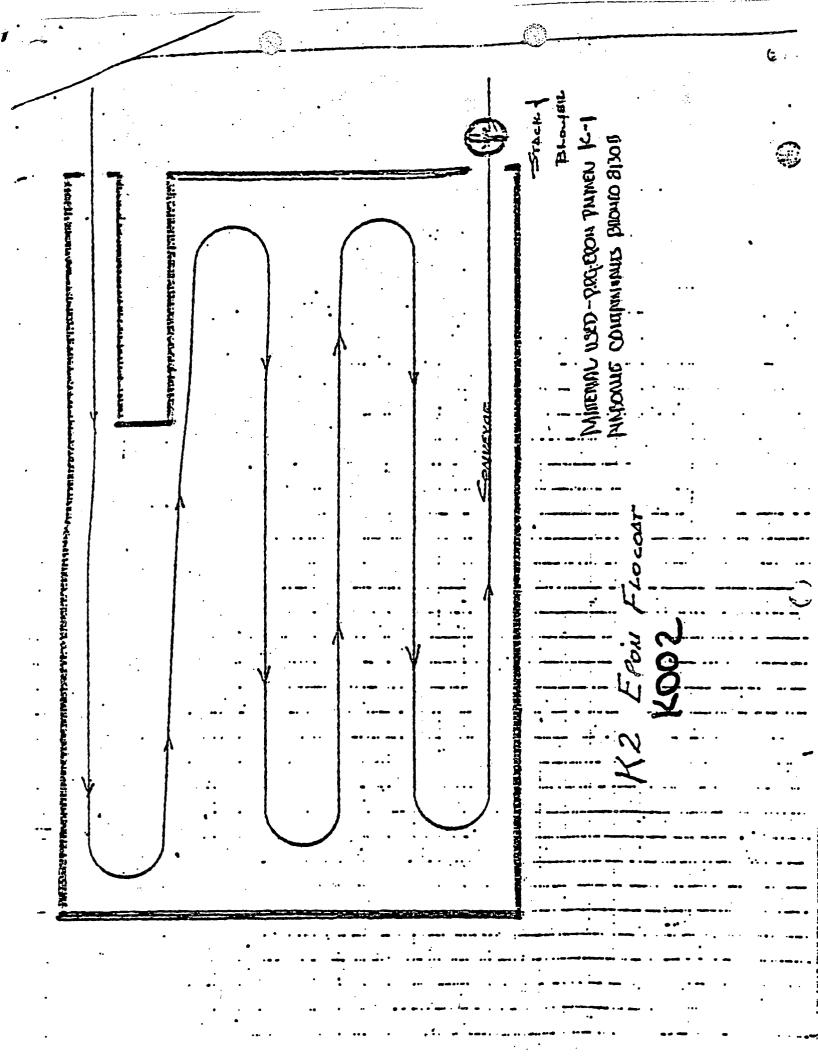
CHEMICAL NAMES

WATER REDUCIBLE PRIMER

	AG158G1281(GRAY W/R)
Wate <u>r</u>	73.3
Dimethyl Ethano Amine	2.0
Butyl Carbitol	4.8
Butanol	3.3
Methyl Carbitol	4.8
Texanol	1.0
Butyl Cellosolv	e 1.5
2-ethyl Hexanol	8.2
Pine Oil	1.0
Misc. Solvents	0.1
	100.0

Solvent Thinner Ratio 1/6.7

11. Water is only thinner.



U.S. ENVIRONMENTAL PROTECTION AGENCY SURFACE COATING SUMMARY



One Copy Of This form Hust Be Filled Out For Each Coating Line

1. BUSINESS LICENCE NAME OF CORPORATION.	COMPANY OR INDIVIOUAL OWNER:	
MANSFIELD PRODUCTS COMPAN	Y	
2. PLANT ACCRESS WHERE COATING OPERATION		
246 E. FOURTH ST., MANSFI	ELD. OH 44902	
3. SOURCE DESCRIPTION (INCLUDING POLLUTI		
<u> </u>	TATIC HAND GUN TOUCH-UP & OVEN	
4. SOURCE CLASSIFICATION (PAPER COATER.	METAL FURNITURE, ETC.):	
MAJOR APPLIANCE (WASHERS	& DRYERS)	
5. COATING EQUIPMENT HANUFACTURER AND MOD	EL HUMBER:	
nordson an-8 electrostati	C HAND GUNS	
6. METHOD OF APPLICATION:		
SPRAY:	DIP COAT	
AIR ATOMIZATION	FLOW COAT	
	"ELECTRO COAT	
OTHER (LOENTLEY)	ROLL COAT INUMBER OF COATING STATIONS 2	•
7. BOOTH TYPE:		
BOOTH AFLOOR DRAFT WALL DRAFT	OTHER . CONVEYORIZED .	
BOOTH BFLOOR DRAFT WALL DRAFT	OT OTHER . CONVEYORIZED CX	
BOOTH CFLOOR DRAFT WALL CRAFT	M OTHER . CONVEYORIZED K	
BOOTH DFLOOR DRAFT WALL BRAFT	ON OTHER . CONVEYORIZED CK	
8. DISPOSITION OF COATED ITEMS:		
AIR DRY OVEN BAKE	OTHER 🗌	
TIME BETWEEN COATING AND BAKING	20 MIN.	
DRY OR BAKE TIME AND TEMP	20 MIN. 350°F.	
9. OPERATIONAL DATA:		
TYPE OF ARTICLE COATED META	L FLATWARE	
OPERATENG SCHEDULE8HOURS/GA	YX DAYS/YEAR X 235	
OR EACH COATING PROVIDE: ATTACHED	11. FOR EACH THINNER PROVIDE: ATTA	ACHED
Type Of Coating:	Identification Ho.:	
Hanufacturer:	Zanufacturer:	
Identification No.:	Annual Usage:	
Annual Usage:	Chemical Composition:	
Weight Per Gal. :	(Indicate If Wt. Or Yol	. Perce
Weight Percent Solids;	. •	. '
Chemical Composition Of Volatiles:		
Ifhamies Numer Indiases A Us. As Va	I Beenne I	

Solvent Thinner Ratio: { Gal. Thinner/Gal. Coating }

Hlac.Solventa

0.6

10.		KU03 - 411	FLOOR ELECT	ROSTATIC HAN	D GUN TOUCH-	UP & OVEN				VCII÷50	
SOURCE DESCRIPTION	WHITE DURACRON	ALHOND DURACRON	HARVEST WHEAT DURACRON	AVOCADO DURACRON	COFFEE . DURACRON	WHITE POLYCRON	ALMOND POLYCRON	Harvest Wheat Polycron	AVOCADO POLYCRON	COFFEE DULYCRON	
COATING TYPE OF COATING HAMMFACTURER IDENTIFICATION NO.	Finish PPG AG129W1 101.21	Finish PPG AG129D1047	Finish PPG AG129H1045	Finish PPG AG129A1046	Finish PPG AG129C1048	Finish PPG AG45ZW1519	Pinish PPG AG452D1520	FINISH PTG AG452Y1523	Finish TPG AG452A1522	Finish Prg Ag452C1521	
Annual USAGE Weight Percent Solids R	177 EC 57.8	98 53.8	5 53.5	24 51.1	0 51.1	606 76.3	318 76.3	50 73.4	12 73.6 65.2	10 71.0	
WEIGHT PER GALLON	49.5 10.1	45.0 9.31	45.1 9.23	42.8 8.73	41. 8 8.64	68.6 11.85	68.6 11.69	65.5 10.51	10.60	62.9 9.67	
CHEMICAL COMPOSITION OF CHEMICAL MAMES - DURACRO		AG129W1 (101.21) WNITE	AG129D1047 ALHOND	AG129H1045 HARVEST	AG129C1048 COFFEE	AĞ129A1046 AVOCADO					
I BY WEIGHT	Xylol	38.2	38.4	32.4	28.3	33.2			-		
	Toluol	35.6	36.8	39.0	40.7	41.5		•			
	Nutanol	5.7	6.0	6.6	11.6	7.0		r			
·	leabutenol	4.0	1.3	7.2	2.2	6.2					
	Solvesao 100	8.9	11.7	8.7	9.5	9.4					
,	Cellosolve Acetate	0.2	0.2	0.3	0.3	0.3				·	
·	Butyl Carbitol	4.9	3.4	3.5	3.4						
•	HEK	2.4	2.1	2.2	3.7	2.3					
. H	lec.Solvente	100.0	$\frac{0.1}{100.0}$	0.1	0.1 100.0	0.1					
iligi sol	IDS POLYCRON	AG452W1519 WHITE	AG452D1520 ALMOND	AG452Y1523 HARVEST	AG452C1521 COPFER	AG452A1522 AVOCADO					
	Xylol	62.3	62.1	52.8	58.7	51.5					
	Toluol	6.8	5.1	7.3	6.1	7.2					
	Butanol	10.4	9.3	15.9	·	15.7				Ž	
	Isop ropenol		1,6	1.2	1.1	1.2					
•	Solvesso 100		8.9	8.5	2.4	15.1					
•	Isopat E	2.4	3.2	3.7	2.2	2.5				•	
	lleptane	5.7	7.4	8.6	5.2	5.7					
	Espesol 286	0.2		**	0.2	0.2					
	Buty1 Acetate	0.5	0.7	0.8	0.5	0.5			•		
	PH Acetate		1.1	0.5						·	
	Dincetone Alcohoi	6	,·		23.2	****			Revised 4/1	2/85	

0.4

0.4

0.7

10. KOO3 - 4TH FLOOR ELECTROSTATIC HAND GUN TOUCH-UP & OVEN

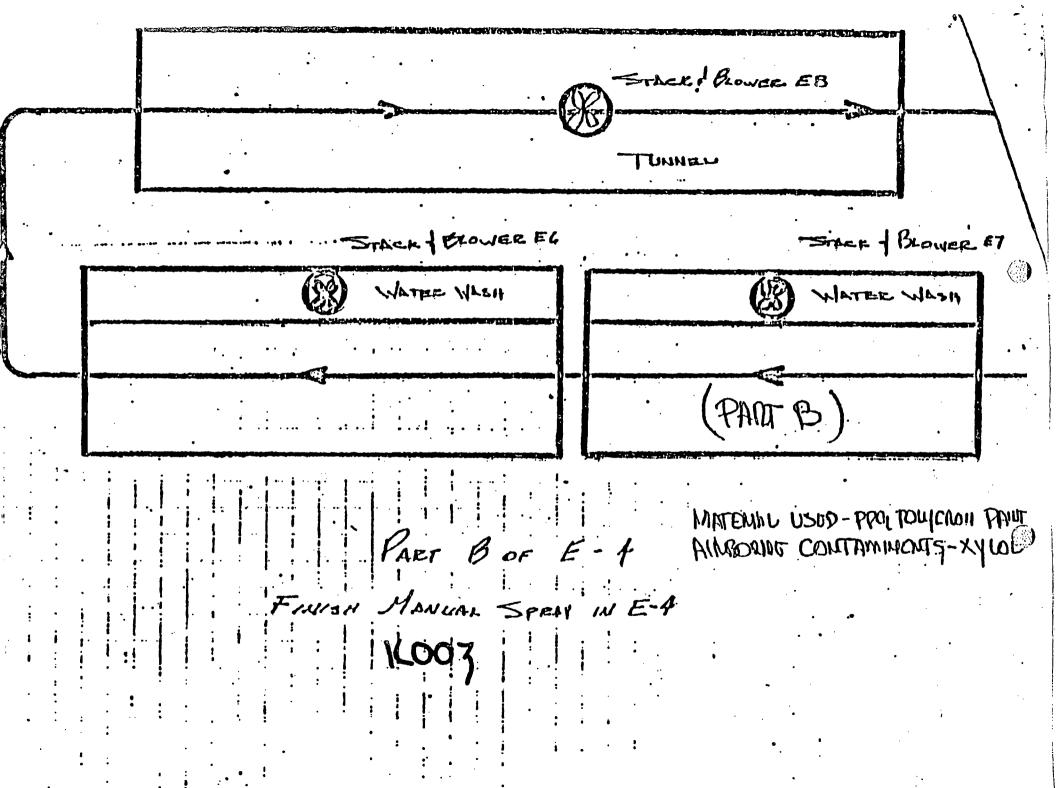
SOLVENT THINNER RATIO

GAL. SOLVENT/GAL. COATING

WHITE DURACRON 1/1.92	ALMOND DURACRON 1/1.73	HARVEST WHEAT DURACRON 1/1.73	AVOCADO DURACRON 1/1.65	COFFEE DURACRON 1/1.62
WHITE POLYCRON	ALMOND POLYCRON 1/2.13	HARVEST WHEAT POLYCRON 1/2.13	AVOCADO POLYCRON 1/2.13	COFFEE POLYCRON 1/2.13

11. KOO3 - 4th FLOOR ELECTROSTATIC HANDGUN TOUCH-UP & OVEN

SOLVENT THINNER ANNUAL USAGE DI-ACETONE ALCOHOL ASHLAND CHEMICAL CO. 20 GALLONS COLUMBUS, OHIO XYLOL ASHLAND CHEMICAL CO. 434 GALLONS COLUMBUS, OHIO TOLUOL ASHLAND CHEMICAL CO. 62 GALLONS COLUMBUS, OHIO BUTYL-CARBITOL. 37 GALLONS VAN WATERS & ROGERS CUYAHOGA HEIGHTS, OHIO



U.S. ENVIRONMENTAL PROTECTION AGENCY SURFACE COATING SUMMARY

One Copy Of This Form Hust Se Filled Out For Each Coating Line

	•	
1.	BUSINESS LICENCE MANE OF CORPORATION, COMPANY OR INDIVIDUAL OWNER:	
	MANSFIELD PRODUCTS COMPANY	· .
2.	PLANT ADDRESS WHERE COATING OPERATION IS LOCATED:	
	246 E. FOURTH ST., MANSFIELD, OH 44902	•
),	SOURCE DESCRIPTION (INCLUDING POLLUTION CONTROLS):	
	KOO3 - 4TH FLOOR 4-LOOP ELECTROSTATIC DISCS	
1.	SOURCE CLASSIFICATION (PAPER COATER, METAL FURNITURE, ETC.):	
	MAJOR APPLIANCE (WASHERS & DRYERS)	
5.	COATING EQUIPMENT MANUFACTURER AND MODEL NUMBER:	
	RANSBURG ELECTROSTATIC 3600 RPM, DEEP WELL DISCS	
δ.	METHOD OF APPLICATION:	
	SPRAY: DIP COAT	
	AIR ATOMIZATION FLOW COAT	
	HOT AIRLESS "ELECTRO COAT	
	OTHER (IDENTIFY) OISCLE ROLL COAT ONUMBER OF COATING STATIONS 4	
7.	SOGTH TYPE:	
	BOOTH AFLOOR DRAFT口 WALL DRAFT区 OTHER口 , CONVEYORIZED 蓝	
	SOOTH SFLOOR DRAFT[] WALL GRAFTECK OTHER[] . CONVEYORIZED []	٠,
	BOOTH CFLOOR DRAFT WALL DRAFT CONTERD . CONVEYORIZED .	
	BOOTH DFLOOR DRAFT WALL DRAFT OTHER . CONVEYORIZED A	
8.	DISPOSITION OF COATED ITEMS:	
	AIR DRY OVEN BAKE X OTHER	
	TIME BETWEEN COATING AND BAKING 25. MIN.	·
	DRY OR BAKE TIME AND TEMP 20 MIN. 350 F.	
9.	OPERATIONAL DATA:	
	TYPE OF ARTICLE COATED METAL FLATWARE	
	OPERATING SCHEDULE8NOURS/DAY DAYS/YEAR 235	
	ATTACUED.	ATTACHED
	H COATING PROVIDE: ATTACHED 11. FOR EACH THINNER PROVIDE:	
	rpe Of Coating: Identification No.:	
*		
-		
	Muel Usage: Chemical Composition: (Indicate If Wt. C	
	ight Percent Solids;	
	ionical Camposition Of Volatiles: (Chemical Names, Indicate If Wt. Or Vol. Percent)	

Solvent Thinner Ratio: . (Gal.Thinner/Gal. Coating)

AC	8-	26
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SOURCE DESCRIPTION	ON MILT'E MIRAGRON	ALMOND DURACKON	HARVEST WHEAT DURACRON	AVOCADO DURACRON	COFFEE DURACRON	WILLE POLYCRON	ALMOND POLYCROM	HARVEST UNEAT POLYCRON	AVOCADO POLYCRON	COPFEB POLYCRON
COARTING		•	٠ وـ						•	,
COATING TYPE OF COATING MANUFACTURER IDENTIFICATION	PPG	FINISH PPG AG129D1047	FINISH PPG AG129H1045	Pinish PPG AG129A1046	finish PPG AG129C1048	finish PPG AG452W1519	Finish PPC AG452D1520	FINTSH PPG AG452Y1523	PINISH PPG AG452A1522	FIRISH PPG AG452C1521
ANNUAL USAGE VELGUT PERCENT	3370	1854 53.8	53.5	0 51.1	0 51.1	11,517 76.3	6051 76.3	941 73.4	224 73.6	185 71.0
WEIGHT PER GAL	USED 49.3 LON 10.1	45.0 9.31	45.1 9.23	42.8 8.73	41.6 8.64	68.6 11.85	68.6 11.69	65.5 10.51	65.2 10.60	62.9 9.67
CHEMICAL COMPO	SITION OF VOLATILES - DURACRON	AG129W1 (101.21) WILTE	AG129D1047 ALHOND	AG129H1045 HARVEST	AG129C1048 COPFEE	AG129A1046 AVOCADO				
X BY WEIGHT	Xylol	38.2	38.4	32.4	28.3	33.2	•			
	Toluel	35.6	36.8	39.0	40.7	41.5	•			
	Butanol	5.7	6.0	6.6	11.8	7.0				•
	Teobutenol	4.0	1.3	7.2	2.2	6,2				
	Solvenso 100	8.9	11.7	8.7	9.5	9.4				
• •	Cellosolve Acetate	0.2	0.2	0.3	0.3	0.3				
·	Butyl Carbitol	4.9	. 3.4	3.5	3.4					
	HER	2.4	2.1	2.2	3.7	2.3				
	Hisc.Solvents	100.0	0.1 100.0	0.1	$\frac{0.1}{100.0}$	$\frac{0.1}{100.0}$			••	
	HIGH SOLIDS POLYCRON	AG452W1519 WRITE	AG452D1520 ATMOND	AG452Y1523	AG452C1521 COFFEE	AG452A1522 AVOCADO -			٠	•
	Xy lo1	62.3	62.1	52.8	58.7	51.5			•	
	Taluel	6.8	5.1	7.3	6.1	7.2	•			
	Butanol	10.4	9.3	15.9		15.7				•
	Isopropanol	1.7	1.6	1.2	1.1	1.2				
	Solvesso 100	9.7	8.9	8.5	2.4	15.1				
	leoper E	2.4	3.2	3.7	2.2	2.5				
	lleptane	5.7	7.4	8.6	5.2	5.7				•
	Espesol 286	0.2			0.2	0.2	•			
	Butyl Acetat o	0.5	0.7	 0.8	0.5	0.5		•		
	PH Acetate		1.1	0.5	***					
	Diacetone Alcohol				23.2		•		Revised	4/12/85
	Hisc. Solvents	0.3	<u>8.0</u>	0.7	0.4 100 0	100 0			Conti	

10. KOO3 - 4th FLOOR 4-LOOP ELECTROSTATIC DISC (CONTINUED)

SOLVENT THINNER RATIO

GAL. SOLVENT/GAL. COATING

WHITE DURACRON 1/1.92	ALMOND DURACRON 1/1.73	HARVEST WHEAT DURACRON 1/1.73	AVOCADO DURACRON 1/1.65	COFFEE DURACRON 1/1.62
WHITE POLYCRON	ALMOND POLYCRON 1/2.13	HARVEST WHEAT POLYCRON 1/2.13	AVOCADO POLYCRON 1/2.13	COFFEE POLYCRON 1/2.13

11. KOC3 - 4th FLOOR 4-LOOP ELECTROSTATIC DISC

SOLVENT THINNER ANNUAL USAGE		
DI-ACETONE ALCOHOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	387	GALLONS
XYLOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	8243	GALLONS
TOLUOL ASHLAND CHEMICAL CO. COLUMBUS, OHIO	1173	GALLONS
BUTYL-CARBITOL VAN WATERS & ROGERS CUYAHOGA HEIGHTS, OHIO	707	GALLONS

PART A OF E-A

E-A FINISH ELECTRO-STATIC

: MATURIAL USED - PPG POLICION PAINT AINTOINE CONTAMINEUTS - XYIOL

U.S. ENVIRONMENTAL PROTECTION AGENCY SURFACE COATING SUMMARY



One Copy Of This Form Must Be Filled Out For Each Coating Line

				<u></u>	
1.	BUSINESS LICENCE NAME OF CORPORATION. CO	OMPANY OR IN	DIVIDUAL CHNER:		
	MANSFIELD PRODUCTS COMPANY	·			
2.	PLANT ACCRESS WHERE COATING OPERATION IS	LOCATED:			
	246 E. FOURTH ST., MANSFIEL	D, OH 44	4902		,
1.	SOURCE DESCRIPTION (INCLUDING POLLUTION	CONTROLS)	;		1
	K004	•		ER ACTIVE	
4.	SQURCE CLASSIFICATION (PAPER COATER, HE	ITAL FURNITU	RE, ETC.):		
	METAL LARGE APPLIANCES				
5.	COATING EQUIPMENT MANUFACTURER AND MODEL	NUMBER:			}
				•	
			·		
5.	METHOD OF APPLICATION:	/	-	•	1
	SPRAY:	DIP COAT			
i	PRESSURE ATCHIZATION	FLOW COAT.	-		
	HOT AIRLESSD ELECTROSTATICAIR DISC	'ELECTRO CO.	_		
	OTHER (IDENTIFY)	ROLL COAT.	LI NUMBER O	F COATING STATIONS	
7.	BOOTH AFLOOR DRAFT WALL GRAFT			•	•
	BOOTH BFLOOR DRAFT WALL DRAFT	_	_	- .	
	BOOTH CFLOOR ORAFT WALL CRAFT			-	
	SOOTH DFLOOR DRAFT WALL DRAFT	_		_	1
8.	DISPOSITION OF COATED ITEMS:				1
	AIR DRY OVER BAKE OT	HER 🔲			
	TIME BETHEEN COATING AND BAKING	. —		<i>:</i>	·
	DRY OR BAKE TIME AND TEMP			·	
9.	OPERATIONAL DATA:				
	TYPE OF ARTICLE COATED	•:		·	
	OPERATING SCHEDULEHOURS/DAY	_ DAYS/YEA			
					
R EAC	CH COATING PROYICE:	•	11. FCR	EACH THINNER PROVIDE:	
Ty	pe Of Coating:	•		Identification No.:	
Ka	nufacturer:	•	• •	Manufacturer:	
Id	lentification No.;			Annual Usage:	
Ar	nual Usage:	:	•	Chemical Composition:	
¥	ight Per Gal. :			[Indicate If Wt. C	r 191. P ercent)
Ye	ight Percent Solids;		. •		
. Ch	emical Composition Of Volatiles:	Parenat 1		•	·

Solvent Thinner Ratio: (Gal.Thinner/Gal. Coating) SURFACE COATING SUMMARY



One Copy Of This Form Must Be Filled Out For Each Coating Line

1.	BUSINESS LICENCE MANE OF CORPORATION. CO	CHPANY OR INDIVIDUAL OWNER:	'
	MANSFIELD PRODUCTS COMPANY		,
2.	PLANT ADDRESS WHERE COATING OPERATION IS	S LOCATED:	
	246 E. FOURTH ST., MANSFIE	TD 04 44902	
1	SOURCE DESCRIPTION (INCLUDING POLLUTION		
"	K005 - 3RD FLOOR ELECTROST	• '	
<u></u>			
1	SOURCE CLASSIFICATION (PAPER COATER, MI	•	
	MAJOR APPLIANCE (WASHERS &	DRYERS)	
5.	COATING EQUIPMENT MANUFACTURER AND MODEL	NUMBER:	
	NORDSON AN-8 ELECTROSTATIC	HAND GUN	
6.	METHOD OF APPLICATION:		
1	SPRAY:	DEP COAT	
	AIR ATONIZATION	FLOW COAT	·
		ELECTRO COAT []	•
	OTHER (IDENTIFY)	ROLL COAT I NUMBER OF COATING STATIONS 4	•
7.	BOOTH TYPE:		·
}	BOOTH AFLOOR DRAFT WALL CRAFT		·
-	BOOTH BFLOOR DRAFT WALL DRAFT		
	BOOTH CFLOOR DRAFTED WALL GRAFTE		
	SOOTH DFLOOR DRAFT WALL GRAFT	OTHER . CONVEYORIZED .	
8.	DISPOSITION OF COATED ITEMS:		
		DER .	
	TIME BETWEEN COATING AND BAKING DRY OR BAKE TIME AND TEMP		
	OPERATIONAL DATA:	20 MIN. 350°F.	
"		FLATWARE	•
		B DAYS/YEAR X 235	
L			
OR EAS	H COATING PROVIDE: ATTACHED	11. FOR EACH THINNER PROVIDE A	TTACHED
	me Of Coating:	Identification No.:	
X	nufacturer:	Manufactures:	
30	lentification No.:	Annual Usage:	
A	inual Usage:	Chemical Composition:	
¥	iight Per Gal. :	(Indicate if Mt. O	r Vol. Percent)
N.	eight Percent Solids;	•	•
Cì	nemical Composition Of Volatiles: [Chemical Names, Indicate If Wt. Or Vol	. Percent)	
Sc	lvent Thinner Ratio: (Gal.Thinner/Gal. Coating)		

	ш

hound ton?...

K005 -	3RD	FI.OOR	ELECTROSTATIC	HAND GUN	TOHCH-UP	5 6	UFM

10.		K005 - 3RI	FLOOR ELECT	RUSTATIC HAN	D GUN TOUCH-	UP & OVEN				VCB-50
SOURCE DESCRIPTION	whete impacrou	ALPOND DURACRON	IIARVEST WHEAT DURACRON	AVOCADO DURACRON	COFFEE . DURACRON	unite Polycron	ALPOND POLYCRON	NARVEST WHEAT POLYCRON	Avocado Polycron	Coffee Polycron
COATING TYPE OF COATING HANUFACTURER IDENTIFICATION NO	Finish PPG 0. AG129 w1 101.21	Finish PPG AG129D1047	Finish PPG AC129H1045	Finish FPG AG129A1046	Finish PPG AG129C1048	Finish PPG AG452W1519	Pinish PPG ACA52D1520	Finish PPG AG45271523	Fihtsh PPG AG452A1522	Finish PPG AG452C1521
ANNUAL USAGE WEIGHT PERCENT SO	USED 49.5	181 53.8 45.0	0 53.5 45.1	0 51.0 42.8	0 51.0 41.8	1125 76.3 68.6	590 76.3 68.6	90 73.4 65.5	22 73.6 65.2	18 71.0 62.9
WEIGHT PER GALLON	-	9.31	9.23	8.73	8.64	11.85	11.69	10.51	10.60	9.67
CHEMICAL NAMES -	TION OF VOLATILES DURACRON	AG129W1 (101.21) Wilte	AG129D1047 ALLIDNO	AG129H1045 UARVEST	AG129C1048 COFFEE	AG129A1046 AVOCADO				
I BY WEIGHT	Xylol	38.2	38.4	32.4	28.3	33.2	•			
	Toluol	35.6	36.8	39.0	40.7	41.5		•		
	Butanol	5.7	6.0	6.6	11.8	7.0				
	leobutenol	4.0	1.3	7.2	2.2	6.2				
	Solvenso 100	8.9	11.7	8.7	9.5	9.4				
	Cellosol va Acetate	0.2	. 0.2	0.3	0,3	0.3				
	Butyl	. 4.9	3.4	3.5						
	Carbitol				3.4					
	HER	2.4	2.1	2.2	3.7	2.3				
	Hisc.Solvents	100.0	0.1 100.0	0.1 100.0	0.1 100.0	$\frac{0.1}{100.0}$				·
<u>I</u> I	IGH SOLIDS POLYCRON	AG452W1519 WHITE	AG452D1520 ATMOND	AG452Y1523 MARVEST	AG452C1521 COFFEE	AG452A1522 AVOCADO				
	Xylol	62.3	62.1	52.8	58.7	51.5				
•	Toluol	6.8	5.1	7.3	6.1	7.2	`			
	Dutano1	10.4	9.3	15.9		15.7				
	1sop ropanol	1.7	1,6	1.2	1.1	1.2				
	Solvesso 100	9.7	8.9	8.5	2.4	15.1				•
	Isopar 2	2.4	3.2	3.7	2.2	2.5				
	llep tane	5.7	7.4	8.6	5.2	5.7			•	
•	Espesol 286	0.2			0.2	0.2	•			
	Buty1 Acetate	0.5	0.7	0.8	0.5	0.5	•			
								•		
	PH Acetate		1-1	0.5					_	
	Discatone Alcohol		-	was:	23.2	****	•		Revised	1 4/12/85
	884 - M 9- A-							•		

0.7

0.4

Hisc.Solvents 0.3

10. K005 - 3RD FLOOR ELECTROSTATIC HAND GUN TOUCH-UP & OVEN

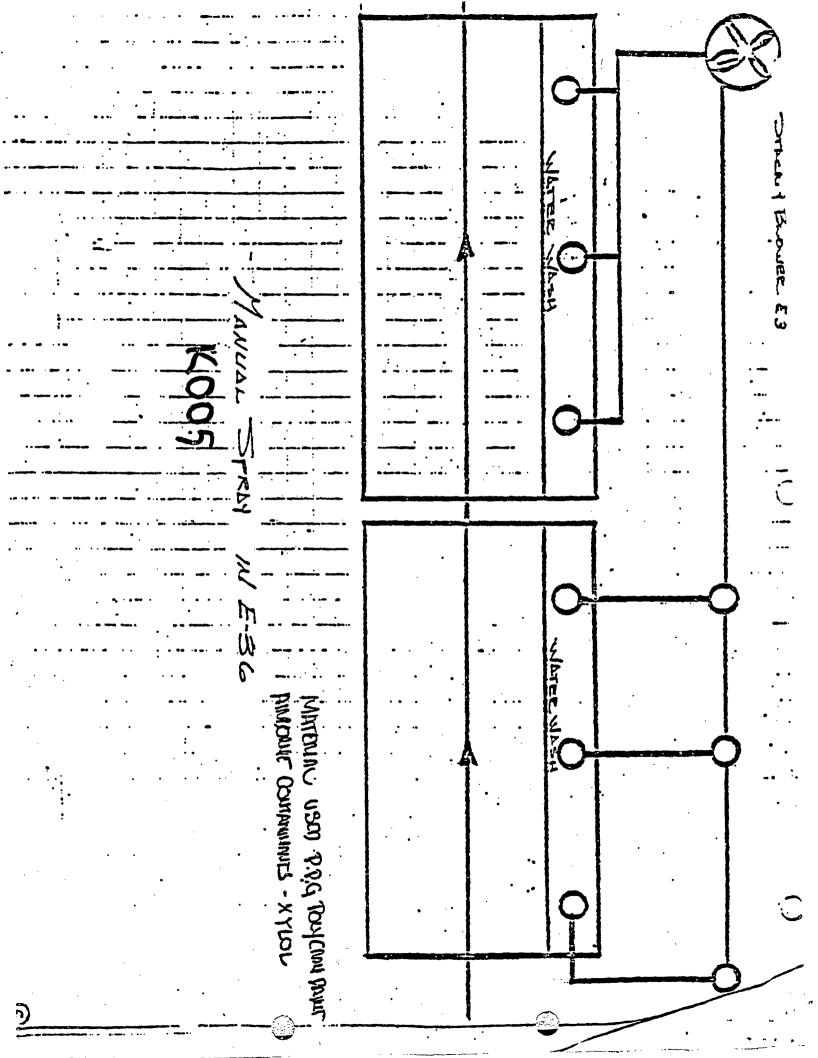
SOLVENT THINNER RATIO

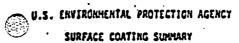
GAL. SOLVENT/GAL. COATING

WHITE DURACRON 1/1.92	ALMOND DURACRON 1/1.73	HARVEST WHEAT DURACRON 1/1.73	AVOCADO DURACRON 1/1.65	COFFEE DURACRON 1/1.62
WHITE POLYCRON 1/2.13	ALMOND POLYCRON 1/2.13	HARVEST WHEAT POLYCRON 1/2.13	AVOCADO POLYCRON 1/2.13	COFFEE POLYCRON 1/2.13



SOLVENT THINNER ANNUAL USAGE DI-ACETONE ALCOHOL 37 GALLONS ASHLAND CHEMICAL CO. COLUMBUS, OHIO XYLOL ASHLAND CHEMICAL CO. 807 GALLONS COLUMBUS, OHIO TOLUOL ASHLAND CHEMICAL CO. 114 GALLONS COLUMBUS, OHIO BUTYL-CARBITOL. 69 GALLONS VAN WATERS & ROGERS CUYAHOGA HEIGHTS, OHIO







One Copy Of This Form Must Be Filled Out For Each Coating Line

	7
1. BUSINESS LICENCE MAME OF CORPORATION. COMPANY OR INDIVIDUAL OWNER:	
MANSFIELD PRODUCTS COMPANY	
2. PLANT ADDRESS WHERE COATING OPERATION IS LOCATED:	-{
246 E. FOURTH ST., MANSFIELD, OH 44902	
3. SOURCE DESCRIPTION (INCLUDING POLLUTION CONTROLS):	7
K007 NO LONGER ACTIVE	
4. SOURCE CLASSIFICATION (PAPER COATER, METAL FURNITURE, ETC.):	
METAL - LARGE APPLIANCES	
5. COATING EQUIPMENT MANUFACTURER AND MODEL NUMBER:	7
6. METHOD OF APPLICATION:	4
SPRAY: DIP COAT	Ì
AIR ATONIZATION FLOW COAT	
PRESSURE ATCHIZATION 'ELECTRO COAT'	
ELECTROSTATICAIR DISCU ROLL COAT NUMBER OF COATING STATIONS	ij
7. BOOTH TYPE:	7
BOOTH AFLOOR DRAFT WALL DRAFT OTHER . CONVEYORIZED	
BOOTH BFLOOR DRAFT WALL DRAFT OTHER OTHER OTHER	
BOOTH CFLOOR DRAFT WALL DRAFT OTHER . CONVEYORIZED	1
BOOTH DFLOOR DRAFT WALL DRAFT OTHER . CONVEYORIZED	
8. DISPOSITION OF COATED ITEMS:	1
AIR DRY OVEN BAKE OTHER	1
TIME BETWEEN COATING AND BAKING	1
ORY OR BAKE TIME AND TEMP	i
9. OPERATIONAL DATA:	┪.
TYPE OF ARTICLE COATED	1
OPERATING SCHEDULEHOURS/DAY DAYS/YEAR	
	7
EACH COATING PROVIDE: 11. FOR EACH THINNER PROVIDE:	
Type Of Coating: Identification No.:	
Manufacturer: Xanufacturer:	
Identification No.: Annual Usage:	
Annual Usage: Chemical Composition	
Weight Per Gal. : (Indicate If Wt.	Or Yol.
Weight Percent Solids;	
Chemical Composition Of Volatiles: (Chemical Numes, Indicate If Wt. Or Vol. Percent)	

U.S. ENVIRONMENTAL PROTECTION AGENCY



One Copy Of This Form Must Be Filled Out For Each Coating Line

1.	BUSINESS LICENCE NAME OF CORPORATION. COMPA	ANY OR INDIVIDUAL OWNER:	7
	MANSFIELD PRODUCTS COMPANY	ew.	
2.	PLANT ADDRESS WHERE COATING OPERATION IS LO	CATED:	-
	246 E. FOURTH ST., MANSFIELD,	ОН 44902	
3.	SOURCE DESCRIPTION & INCLUDING POLLUTION CO	ENTROLS):	_
	KOO8 - 5TH FLOOR WATERBORNE	•	·
_			_
4.	SOURCE CLASSIFICATION (PAPER COATER, METAL	•	
	MAJOR APPLIANCE (WASHERS & DR	RYERS)	
5.	COATING EQUIPMENT MANUFACTURER AND MODEL NU	IMBER:	7
	SPRA-CON FLO-COATER & SPRA-CO	ON OVEN	
6.	METHOD OF APPLICATION:		-
	SPRAY: DI	IP COAT	
	AIR ATOMIZATION FL PRESSURE ATOMIZATION	LOW COAT	
	HOT AIRLESS	LECTRO COAT []	
	OTHER (IDENTIFY) A	OLL COAT INUMBER OF COATING STATICHS	4
7.	BOOTH TYPE:		7
	BOOTH AFLOOR DRAFT WALL CRAFT & OT	-	
	BOOTH 8FLOOR DRAFT[] WALL DRAFT[] OT		
	BOOTH CFLOOR DRAFT[] WALL CRAFT[] OT		
	BOOTH DFLOOR DRAFT WALL DRAFT OT DISPOSITION OF COATED ITEMS:	HERE CONVEYORIZED E	_
٥.	AIR DRY OVEN BAKE OTHER	: N	
	TIME BETWEEN COATING AND BAKING 20	· · · · · · · · · · · · · · · · · · ·	
	DRY OR BAKE TIME AND TEMP 20		
9.	OPERATIONAL DATA:		
	TYPE OF ARTICLE COATED METAL E	FLATWARE	
	OPERATING SCHEDULE8HOURS/DAY	DAYS/YEAR 235	
R EAG	M COATING PROVIDE:(ATTACHED)	11. FOR EACH THINNER PROVIDE	: (ATTACHED)
Ty	pe Of Coating:	Identification No.:	•
Ka	nufacturer:	# . · Hanufacturer:	
Id	entification Ng.;	Annual Usage:	
An	nual Usage:	Chemical Composition	n: Or Vol. Percent)
	ight Per Gal. :	fanorese ti acc	in total refeeling /
	ight Percent Solids;	· •	
. Ch	emical Composition Of Volatiles: (Chemical Names, Indicate if Wt. Or Vol. Pe	ercent)	

Solvent Thinner Ratio: (Gel.Thinner/Gal. Coating)

10. KOO8 - 5TH FLOOR WATERBORNE PRIMER & OVEN

COATING

TYPE OF COATING:

WATERBORNE PRIMER

MANUFACTURER:

PITTSBURGH PLATE GLASS, DELAWARE, OH (PPG)

IDENTIFICATION NO.:

AG158G1281

ANNUAL USAGE:

16,121 GALLONS

WEIGHT PER GALLON:

9.7# AS RECEIVED

WEIGHT PERCENT SOLIDS:

45% AS RECEIVED; 36% AS USED (THIS IS WITH

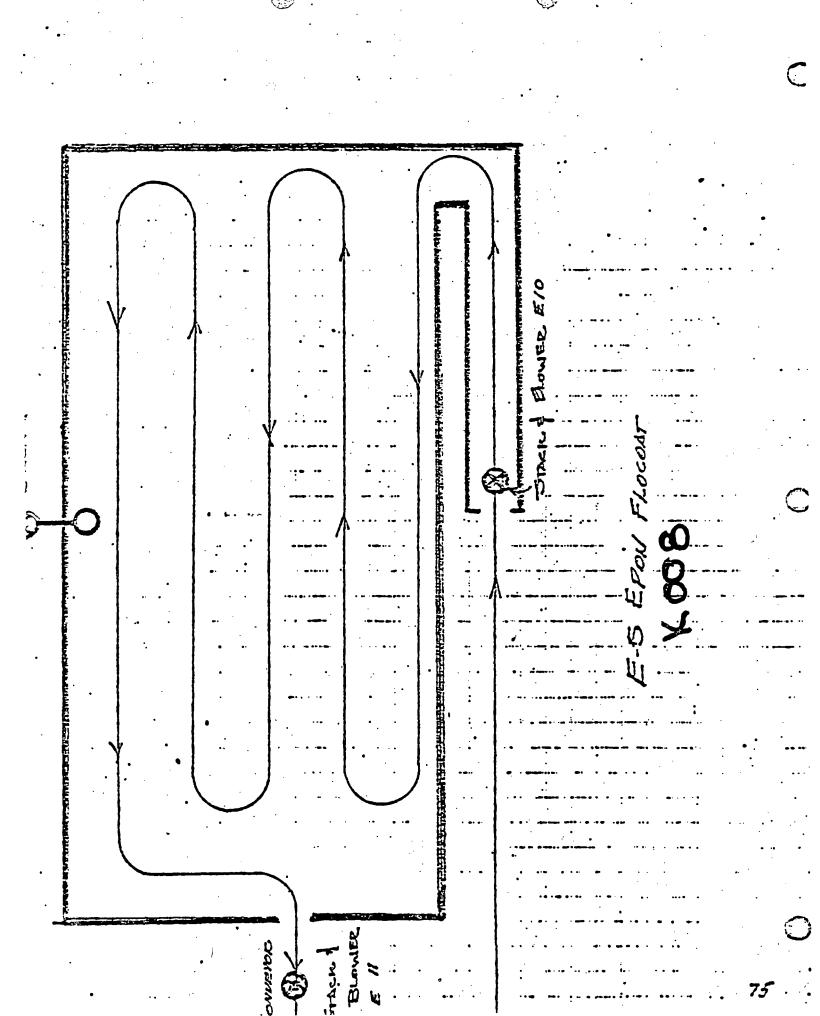
52.5% WATER)

CHEMICAL COMPOSITION OF VOLATILES BY WEIGHT: CHEMICAL NAMES - WATER REDUCIBLE PRIMER

	AG158G1281
	GRAY W/R
Water	73.3
Dimethyl Ethanol Amine	2.0
Butyl Carbitol	4.8
Butanol	3.3
Methyl Carbitol	4.8
Texanol	1.0
Butyl Cellosolve	1.5
2-ethyl Hexanol	8.2
Pine Oil	1.0
Misc.Solvents	0.1
	100.0

Solvent Thinner Ratio 1/6.7

11. Water is only thinner.



DATE FORM BITE NAME.	DATE FORM COMPLETED 8/13/90 PANN FOHOS323 TODN FOS - 9001-017 EPA 1.D. N. 2HD 000733 601	FORM K	EGION V	21.7 EPA 1.D	** 2HD 000	733.601.	l a
1000 WUD1	HEADER HEADER AND AND AND AND AND AND AND AND AND AND	22.94 Indian	E, KARACK	DATE BENT T	*********	*********	***
COUL # ***********************************	DAINKING (************************************	WATER BAB # OR	EXPECTED CONTERS BORD TO LABORATORY COULERS SAMPLES A CONTERS SAMPLES OF NUMBER OF NUMBER OF DATE TO LABORATORY COULERS SAMPLES OF DATE TO LABORATORY COULERS SAMPLES OF DATE TO LABORATORY COULERS SAMPLES OF DATE TO LABORATORY COULERS SAMPLES OF DATE TO LABORATORY COULERS SAMPLES OF DATE TO LABORATORY COULERS SAMPLES OF DATE TO LABORATORY COULERS	NUMBER OF	NUMBER OF STREET	ARESERVE HERESER PORT PORT PORT PORT PORT PORT PORT POR	DATE SHIPPED TO LAB
ABNS PEBT/PCB METALS CN							
LOW WATERS FRACTION	BURFACE WATERS NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE TOTAL	EXPECTED DATE TO SAMPLE	LABORATORY NAME	NUMBER OF COOLERS SHIPPED	NUMBER OF BRAPLES SHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
HANS PEST/PCB ASTALS CN							
**************************************	**************************************	**************************************	LABORATORY NAME	NUMBER OF COOLERS BHIPPED	NUMBER OF BANDLES	AIR BILL NUMBERS	DATE SHIPPED TO LAB
ABNUE ABRITANCE ABETANCE GN	ABNE ABST/PCB METALS METALS	124/40 Jcn		2017 inru8		**********	***************************************
RESIDENTIAL/ MI LOW DETECTION FRACTION VOA	RESIDENTIAL/ MUNICIPAL WELL WATERS (DRINKING WATER BALLOW DETECTION LIMITS/FAST TURN AROUND FRACTION SAMPLES+ BLANKS+ DUPLICATE TOTAL VOA	CAMPLES) EXPECTED DATE TO SAMPLE	LABORATORY	NUMBER OF COOLERS SHIPPED	NUMBER OF SAMPLES SHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
70017 70017 70017 700 700 700 700 700 70	DUCT-TON ON THE PROPERTY OF TH		*************************************			**************************************	******
868	BAS #	BERVICE AROUEBY	FOR THE	GITE			

Edward Comment

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11,000	HO530	301	ROJEC	. 1		-017	CA	SEA. 1	Talifa Talifa	NO.	¥ 19				40				/ co	OLER :	4 /2	59
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.814	NO. D	ATE,	TIME	COMP	GRAB		STATIO	N LOCATIO	Note that the second	TAINERS	/	01/2					TH	G No	IHBER	<u>5</u>		ONCENTRA ATRIX
EHO	42 92	5-90	1630	 	X		<u> 51</u>		lack or	3.4	13	15	A Sign			15.6	_		-78			5016
EHO	0.439-2	5-90	1330	.	\times		<u> </u>		· .	3	2	13			•	;			<u>-82</u>			SOIL
Ell	0447-24	5.90	1400		X	· · · · · ·	<u>د ک</u>		grant of		ا کی	15	10	K	'4 " ·				-86			501L
EHC	2459.2	5.90	1445		X		<u>54</u>	/. 		3	ÿ	1,	j						- 70		• •	SOIL
PHI	12 46 9.2	5.90	1520		X		<u>55</u>		1	<u> </u>	a	13	i-(1))		13.	114.7%	132	692	-94	-	٠, ١	5014
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EH.	\$ 499.2	5.90	1330		X		<u> </u>		American	3	2	9 1	-				132	704	1-00	,		3016
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3577		773	·						<i>y</i>	A 24 780 10		26	. 3		3.4							m del
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	e e e e			ŀ							AV.	*	24.50° (3 / 1 2 k	# <u>\</u>	· · · · · · · · · · · · · · · · · · ·	機能	AND THE RESERVE OF THE PERSON	· 80Z	.015	7043	
- 1										2 37.07		7117	.i.	17 17	25%						,	:बैः
	等為 自然		· 	e!		· ·	44			The State of the S	\ \			19 11	u_i'	8.2			N COOL		16.7	
Reli	inquished t	oy: (S	ignature)				/ Time 	Received	by: (Signatul	m)	Reli	nquist	ned by	y: (Sig	natur	9		Date	/Time	Received b	Y: (Signa tu	ire)
2	I.K.	رندسدن	·ku		. 19-	-25-90	1830	10 10				4. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.			}		聚 蒙	ATTENDED TO THE PARTY OF THE PA			, (2)	
	inquished t	oy: (s	ignature)	'	:	Date ,	/Time		by: (Signatui	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		ngulsh			neture		作 第 第 第 第	Dete	/Time	Received b	y: (Signet	ini Koda Ali
Rell	inquished t	py: (S	ignature)			Date ,	/Time	Received, (Signature)	for Laborat	ory by:	Tanks	Date	• /T /(112 V 12 U	THE PARTY		Ex TC	-,,	COT

// // // // // // // // // // // // //		1/00
1. Type of Activity (Check one)	2. Region Number Sampling Co. 4. Date Shipped Carrier 5. Sample Description 5. Sample De	ption (Enter in Column A)
☐ ENF ☐ NPLD ☐ RA ☐ SI ☐ STSI ☐ Cher (Specify,		
ESI PA PRIFS STPA	Sampler (Name) To a Airbill Number of the Sound ED KARECKE & 9/876 47295 3 Leachate	
Non-Superfund Program	3. Ship To: Au TONTA Coult Double volume required for maker the South So	
	Spike/duplicate aqueous gample?	
Site Name		
MANSFIELD PRODUCTS.CO.	1 300 2 6 COVD MAC & lough decining and high doublements 1 1. Asserted	AS) (Specify)
City, State 7 Site Spill II	DIWICINIUM EO A SOMI CER TO A B LITE E LI LI LI LI LI LI	AS) (Specify)
MANSFIELD, OH N/A	See reverse for additional instructions.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
(A) (B) (C)	(D) RAS Analysis	
C(p) Sample Concen-		
Sample Descript tration Present	Low Conc. Sow Special Station Date Time of Corresponding	ខ្លុំ ត្រូង ទៀត នៅ 🕍
/Emm /shele /Emm Mamod ative	Handling Tabling To Sample 2 1 La Sample	
box 5) Hehigh Osed/Voil 記録		
MEHA 35 5 L	X 200 = 30 = 31 = 935.90(30 EHQ 42	
neha 36 5 L	X	
MEHA 37 5 L X	S NA 5 2 5 3 93595 1400 E10 44	
MEHA 38 5 L X	X 3 5 2 2 3 5 16 9 5 10 1445 E40 245	
MEHA 39 5 L	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
MEHA 40 5 L	X 56: 125.10 130 EHO 47	
MEHA 41 5 L	X 3 78 725.901300 EHQ 42	8 6
MEHA 1/2 5 L	8 125701330 EHQ 49	
MEHA 43 5 L	× 59 9.25.90.1330 EHQ 50	in 8 complete
44. EK	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	有 20 经分类
45 EK	4 48 8 8	
	· · · · · · · · · · · · · · · · · · ·	2. 第二、连续推进
9 : 9 E	1 SAMPLESE	
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3 2	1 1 1 1 M 1 1 8 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
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land the second	حديث من من المنظم المنطق والمنطق والمنطق والمنطق المنطق المنطق والمنطق المنطق المنطق المنطق المنطق والمنطق الم	

ENVIRONMENTAL PROTECTION AGENCY

REGION 5 200 230 South Dearborn Street Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD PROJ. NO. * PROJECT NAME COULER # 1660 Fos- 9001-11/7 Forio 532 CASE : 14960 NO. SAMPLERS: (Signature) REMARKS CON-TAINERS LUW CONCENTRATION STA. NO. TIME STATION LOCATION DATE TAR NIMBERS MATRIX 726 79 ME HA 35 19-25-90/6.3 MEHA 319-25-901230 -111 1111117779259 14m SOIL MENA 38 19-15-90 1445 54 _5011 " with the same of the same 10 70 12.10 c0// 2011 S0/194 10.1 1300 116111 42 9.250 13 3C Mr. HA 43 9:25.96 1330 CUIL 107 4: 802 015 7043 130 (1) 130 (1) 20 1. 11 Miles Relinquished by: (Signature) Date / Time Received by: (Signature) ◇ 海流 Date / Time Relinquished by: (Signature) 1018 Received by: (Signature) 19-25-90 1830 Relinquished by: (Signature) Date / Time Received by: (Signature). Relinquished by: (Signature) ついる Date / Time Received by: (Signature) Relinguished by: (Signature) Remarks SHIPPED FED EX TO SKINNER Date / Time Received for Laboratory by: 2000 Date /Time (Signature) AIR BULE # 91576 47275 Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File CUSTODY - FALC: 17:0:5, 128886

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490 Case Number SAS No. (if applicable) Organic Traffic Report
(For CLP Use Only) 2. Region Number Sampling Co. 4. Date Shipped Carrier 1. Type of Activity (Check one) 5. Sample Description (Enter in Column A) □ ENF □ NPLD □ RA ☑ SI □ STSI 1. Surface Water □ ER □ O&M □ RD □ ST □ Other (Specify) Sampler (Name)
□ ESI □ PA □ RIFS □ STPA ED ** CK 1 □ **Ground Water** 3. Leachate Rinsate 3. Ship To:
SCOTT DEVORE
ENV. CONTROL TECH
Ship medium and high concentrationsamples in paint cans.

ANN ARBOR, MI 48/08 See reverse for additional instructions. Non-Superfund Program Sol/Sediment 6. Oll (8A8) 7. Waste (SAS) Site Name 8. Other (SAS) (Specify) MANSFIELD PRODUCTS CO. Site Spill ID City, State IF VOA BAMPLE PRESERVED INDICATE IN MANSFIELD, OH COLUMN C WITH Y OR N. (A) Sample (B) Concen-tration (C) A CLP Corresponding Date/Time of ,:: Descrip-Sample Special Handling CLP Inorganic Station 4 tion Sample : Pest/ ARO/ L=low Number Location (Sample VOA BNA Collection M=med (From PCB (From labels) Number box 5) H=high EHO. 3 th 1.0 ablaO. Ž ΄ ι 1PMEN 뜷 **3** : 1 1 Assert Services WARRING THE

Book Granges

in the section of the

SITE NAME/TODY_	MANSFIELD	PRODUCTS CO.	
CASE NUMBER		,	
SAMPLE #/STAT-10	n-Location	5/	
SAMPLING DATE _	9-25-90	SAMPLING TIME	1630
ORGANIC TRA	FFIC NUMBER	E HQ 42	
I NORGANIC T	RAFFIC NUMBER	ME HA 35	
			. س
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132676	W020/0/3
120 ml	VOA	1 77	1. 1
807	EXT	78	0157043
802	HET	V 79	
	ľ		-
	İ		
	ĺ		İ
	1		
	<u> </u>		
PHYSICAL DESCRI	O SHIT TA HOITGE	F COLLECTION:	
SANDY M	ED, BROWN	TOPSOIL	
		·	-
PHYSICAL CHANGE	ES FROM TIME OF	COLLECTION UNTIL SHIPMENT:	NONE
INSTRUMENT REAL	DINGS		
рН	Λ	1/1	
CONDUCTIVITY		////	
TEMPERATURE			

SITE NAME/TODA_	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE-F/STATIO	ON LOCATION	-52	
SAMPLING DATE_	9-25-90	SAMPLING TIME_	1230
*	AFFIC NUMBER	E HQ 43	
INORGANIC	TRAFFIC NUMBER	MEHA 36	•
		•	
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132680	W020/0/3
120 ml	VoA	81	1. 1
8 02	EXT	82	0157043
862	MET	83	
	\		-
			
PHYSICAL DESCR	IPTION AT TIME OF	COLLECTION: SICTY	CAND + GRAVEL
			
PHYSICAL CHANG	ES FROM TIME OF C	COLLECTION UNTIL SHIPMENT:	NONE
	•		
INSTRUMENT REA	DINGS	-/	
COUNCITATIV		//	
CONDUCTIVITY			
TEMPERATURE	/	• '	

SITE NAME/TODY_	MANSFIELD	PRODUCTS CO.	
CASE NUMBER _	14960		
SAMPLE F/STATIO	ON-LOCATION	3-3	
SAMPLING DATE_	9-25-90	SAMPLING TIME	1400
ORGANIC TRA	AFFIC NUMBER	E 40 44	
I NORGANIC	TRAFFIC NUMBER	ME HA 36	•
·			
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA		W0201013
120 ml	VOA		<u> </u>
80z	EXT		0157043
802	MET		1 1
	İ	1	-
	ļ		
	1	1	
	1		
PHYSICAL DESCR	IPTION AT TIME OF	COLLECTION:	
			
PHYSICAL CHARG	ES FROM TIME OF O	OLLECTION UNTIL SHIPMEN	M: NONE
THE TOTAL CHIT OF A			
INSTRUMENT REA	n1w2		
CONDUCTIVITY	A f	/A	
CONDUCTIVITY	/ <i>V</i> _/		
TEMPERATURE	/	•	

SITE HAME/TODA_	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE #/STATIO	N LOCATION	54	and and the second seco
SAMPLING DATE _	9-25-90	SAMPLING TIME	1445
ORGANIC TRA	FFIC NUMBER	EHQ 42	
INORGANIC T	RAFFIC NUMBER	ME <i>HA</i> 35 .	
•		•	
80TTLE	ANALYSIS	TAG NUMBERS	LOT HUHBER
120 ml	VO A	132688	W0201013
120 ml	VOA	89	1 1
80Z	EXT	90	0157043
802	NET	9/	1 1
	Ì		-
	<u> </u>		
	·		
			<u>i</u>
PHYSICAL DESCRI	PTION AT TIME OF	COLLECTION: BROWN	MUN
			
PHYSICAL CHANGE	ES FROM TIME OF CO	DILECTION UNTIL SHIPHENT:	NONE
		Account All In Distriction	
	· · · · · · · · · · · · · · · · · · ·		
INSTRUMENT REAL	OTRGS		
pH Hq		1	
CONDUCTIVITY	1 / /	/A	
TEMPERATURE		· · · · · · · · · · · · · · · · · · ·	

SITE NAME/TODE_	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE #/STATIO	N LOCATION_	53	
SAMPLING DATE_	9-25-90	SAMPLING TIME	1520
ORGANIC TRA	FFIC NUMBER	E 4846	
•	RAFFIC NUMBER	ME 14 A 39 .	
		•	
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132692	W020/0/3
120 ml	VOA	93	1. 2
80z	EXT	94	0157043
802	NET	95	1 1
		ĺ	-
	L		
	ĺ		
			
	·		
PHYSICAL DESCRI	PTION AT TIME OF	COLLECTION: SAND	
• • • • • • • • • • • • • • • • • • • •			

PHYSICAL CHANGE	ES FROM TIME OF O	OLLECTION UNTIL SHIPHENT:	NONE
	·		1

INSTRUMENT REAL	DINGS		
Н	A	/	
CONDUCTIVITY	/V /	' M	
TEMPERATURE	/	•	

SITE NAME/TODA	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE VISTAT	ION LOCATION		
SAMPLING DATE	9-25-70	SAMPLING TIME	1230
ORGANIC T	RAFFIC NUMBER	E HQ 47	
· ·	TRAFFIC NUMBER	ME IIA 40	• .
		•	
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUHSER
120 ml	VOA	132696	W0201013
120 ml	VOA	97	1 2
8oz	EXT	98	10157043
802	NET	99	1 1
		1	-
·		1	
	1		
PHYSICAL DESC	RIPTION AT TIME OF	COLLECTION:	
		•	· ·
			·
PHYSICAL CHAM	IGES FROM TIME OF C	DULECTION UNTIL SHIPHENT	: NONE
		<u> </u>	
			· ·
INSTRUMENT RI	EADINGS	· · · · ·	
На			
CONDUCTIVITY	/V	14	
TEMPERATURE	7	•	

SITE NAME/TODE	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960	·	
SAMPLE TISTATION	H LOCATION_	57	
SAMPLING DATE_	9-25-90	SAMPLING TIME	1300
ORGANIC TRA	FFIC NUMBER	E HQY8	
Ť	RAFFIC NUMBER	ME HA 41	•
			٠
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUHSER
120 ml	VOA	132700	W0201013
120 ml	VOA	61	<u> </u>
80Z	EXT	02	0157043
802	MET	0.3	1 1
			-
PHYSICAL DESCRI	PTION AT TIME OF	COLLECTION: DRY O	RGANIC RICH
CHOCCATE	COLORED 7	TOP 5016 .	
PHYSICAL CHANGE	is from time of o	OLLECTION UNTIL SHIPHENT	NONE
	•	·	
			
INSTRUMENT REAL	DIKGS	-	
На	A-/	ta	
CONDUCTIVITY	/V_/	<u></u>	
TEMPERATURE	/		

SITE NAME/TODA_	MANSFIELD	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE 1/STATIO	H LOCATION	58	
SAMPLING DATE_	9-25-90	SAMPLING TIME	/330
ORGANIC TRA	FFIC NUMBER	E 4Q 49	
I HORGANIC T	RAFFIC NUMBER	ME 14"A 42	•
		·	_
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	VOA	132 704	W0201013
120 ml	VOA	05	1. 2
80Z	EXT	06	0157043
802	MET	1 07	
		1	-
	Ĺ		
BUYCTCL BCCCO	VOLTON AT THE OF	COLLECTION	
		COLLECTION: VERY	
TO BLACE	K SOIL , WIT	TH SOME SAND	+ GRAVEL
010000000000000000000000000000000000000	FC CDAL TILE AC AA		
PRISICAL CRANG	EZ EKON-ITWE OF ON	LLECTION UNTIL SHIPHEN	T: NONE
	······································		
INSTRUMENT REA	DINGS	-1	
На	A .	/	
CORDUCTIVITY	/V /	H	
TEMPERATURE	/ ·	•	

SITE NAME/TODE	MANSFIELD !	PRODUCTS CO.	
CASE NUMBER	14960		
SAMPLE LISTATIO	ON LOCATION		
SAMPLING DATE	9-25-90	SAMPLING TIME	1330
ORGANIC TR	AFFIC NUMBER	E 49 50	
	TRAFFIC NUMBER	ME HA 43	
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUHSER
120 ml	VOA	1 132. 708	wo20/0/3
120 ml	VOA	1 09	1. 2
80Z	EXT	1. 10	0157043
80Z	NET	1 / //	1 1
			-
	İ	1 -	
	Ì.	i _	į
	1		
PHYSICAL DESCR	IPTION AT TIME OF C	OLLECTION: SANDY	DARK BROWN
		SOME SILT + GA	
			· .
PHYSTCAL CHARG	ES FROM TIME OF COL	LECTION UNTIL SHIPHENT:	NONE
THE COURT	-	Programme Supplied To	
	<u> </u>		
INSTRUMENT REA	MINGS		
pH pH		/	
CONDUCTIVITY	~	A	
TEMPERATURE		•	· · · · · · · · · · · · · · · · · · ·

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Zone A:

Special Flood Hazard Areas inundated by the 100-year flood, determined by approximate methods; no base flood elevations are shown or FHFs determined.

Zone A0:

Special Flood Hazard Areas inundated by types of 100-year shallow flooding where depths are between 1.0 and 3.0 feet; depths are shown; but no FHFs are determined.

Zones A3, A4, A6, and A8:

Special Flood Hazard Areas inundated by the 100-year flood, with base flood elevations shown, and zones subdivided according to FHF.

Zone B:

Areas between the Special Flood Hazard Areas and the limits of the 500-year flood; areas that are protected from the 100- and 500-year floods by dike, levee, or other water control structure; areas subject to certain types of 100-year shallow flooding where depths are less than 1.0 foot; and, areas subject to 100-year flooding from sources with drainage areas less than 1 square mile. Zone B is not subdivided.

Zone C:

Areas of minimal flooding; not subdivided.

Flood elevation differences, FHFs, flood insurance zones, and base flood elevations for the flooding source studied in detail in the community are shown in Table 3, Flood Insurance Zone Data.

5.4 Flood Insurance Rate Map Description

The Flood Insurance Rate Map for the City of Mansfield is, for insurance purposes, the principal product of the Flood Insurance Study. This map contains the official delineation of flood insurance zones and base flood elevation lines. Base flood elevation lines for riverine flooding sources show the locations of the expected whole-foot water-surface elevations of the base (100-year) flood. The base flood elevations and zone numbers are used by insurance agents, in conjunction with structure elevations and characteristics, to assign actuarial insurance rates to structures and contents insured under the National Flood Insurance Program.

Ste is located of a 10-50 year flood plan,

OHIO EPA GC/GC-MS WATER SAMPLE ANALYSIS Date Received District: SWD0 _____; SED0 _____; NED0 _____; NWD0 _____; CD0 _____. Sample Type: Screening ____; Compliance ____; Complaint ____; Survey ___;
Litigation ____; WELL USE: Public ___; Industrial ___;
Monitor ____; Private ____; Irrigation ____; Private Residential ____. Sample Collector's Name Sample Date/Sample Time :Begin 8711161121 8711171 Sample Date/Sample Time :End Facility Name White Couselidated IND Facility NPDES # _OMOCO4600 Ohio Permit # ZTCOOCO3 + CC _____ Well Depth/Aquifer ____ Well Owner Well Owner Address / Well County/Township Receiving Stream (RM) Rocky Fire of the Mehican River Latitude/Longitude Outfall Number ZTC00003001 Well Number (Date / Extracted Analyzed) File Number Analyst ✓ Volatiles 87-11-24) AY24-3 Railon (11-23-87 12-11-87) 1211x1072 Warthma Acid Extractables Base Neutral Extractables Pesticides Broad Scan Parameter(s) _ _; Continuous ____; Proportional _____. Sample: Grab ✓: Discontinuous Composite Composite Composite Composite Sample Information: Volume/Frequency/Duration Comments on back: Yes \times ; No \ge . Bioassay Sample Submitted: Yes \checkmark ; No $_$.

GRAB SAMPLES WERE TAKEN @ 1150 hours

sample: masst- up. d second

175ml/overy 15min/24 hours only 83 samples taken Nekong / Fraguencia, Duration

Transitui saris

1150 to 810

VOLATILE ORGANICS SAMPLE RESULTS METHODS 601 & 602

SAI	SAMPLE _ O1072 WHITE CONSOLIDATED IND EFFLUENT								
	DATE COLLECTED <u>87-11-17</u> COLLECTOR <u>SCHWARTZ / GERRER</u>								
DA	TE ANALYZED	87-11-24 ANALYST	_C. B.	PILEY	<u> </u>	<u> </u>	_		
DA	TE PROCESSE	D X8-01-05 APPROVED	BY _	TR			_		
NU.	. CAS NO.	COMPOUND	MDL	F*	C*	CONC	,		
			 		1	(ua/L)],		
1	75-35-4	1,1-Dichloroethene	0.5	5	yes	< MUT	-		
2	75-09-2	Methylene chloride	1.8	<u> </u>	0		∤.		
3	156-60-5	trans-1,2-Dichloroethene_	0.5		 		-		
4	75-34-3	1,1-Dichloroethane	0.5	<u> </u>					
5	67-66-3	Chloroform_	0.5		 	<u> </u>	1		
6	71-55-6	1,1,1-Trichloroethane	0.5				[
7	56-23-5	Carbon tetrachloride	0.5	ŀ	<u> </u>	· · ·			
8	107-06-2	1,2-Dichloroethane	0.5			<u> </u>			
9	79-01-6	Trichloroethene	0.5				`		
10	78-87-5	1,2-Dichloropropane	0.5		<u> </u>				
11,	75-27-4	Bromodichloromethane	0.5						
12	100-75-8 -	2-Chloroethylvinyl ether	0.5						
13	10061-02-6	, , , , , , , , , , , , , , , , , , ,	0.5				1		
14	10061-01-5		0.5				ļ,		
15	79-00-5	1,1,2-Trichloroethane	0.5						
16	127-18-4	Tetrachloroethene	0.5						
17	124-48-1	Dibromochloromethane	0.5				1		
18	106-93-4	1,2-Dibromoethane	0.5						
19	75-25-2	Bromoform	0.5						
20	79-34-5	1,1,2,2-Tetrachloroethane_	0.5						
21	71-43-2	Benzene	0.5				1		
22	108-88-3	Toluene	0.5				. 4.		
23	108-90-7	Chlorobenzene	0.5						
24	100-41-4	Ethylbenzene	0.5			V			
25	108-38-3	1,3-Dimethylbenzene**_	0.5		<u> </u>)			
26	106-42-3	1,4-Dimethylbenzene**	0.5			5.3	(**		
27	100-42-5	Ethenyl benzene	0.5	1		< MOL]`. `		
28	95-47-6	1,2-Dimethylbenzene	0.5			2.8	,		
29	541-73-1	1,3-Dichlorobenzene	0.5			<mdl< td=""><td></td></mdl<>			
	106-46-7	1,4-Dichlorobenzene	0.5			. [
31	75-50-1	1,2-Dichlorobenzene	0.5	V	V	V			
*F= *C=	F=Dilution C=Confirmed by GC/MS								

** 1,3-Dimethylbenzene and 1,4-Dimethylbenzene coelute and cannot be separately quantitated at this time. COMMENTS:

a dilution of x5 was the lowest dilution possible due to framing.

OHIO EPA * GC/MS ANALYL & REPORT * BASE-NEUTRAL AND ACID EXTRACTABLES

SAMPLE: 0 1072

DATE COLLECTED: _

APPROVED BY/DATE:

LABORATORY NUMBER: 1211X1072

Warthman

DATE ANALYZED/ANALYST: 12-11-87
DATE EXTRACTED/BY: 11-23-87
DILUTION (F): 5.0 Holland

LBR#	CAS#	COMPOUND	CONC. (UG/L)	MDL	COMMENTS
2	111-44-4	BIS(2-CHLOROETHYL) ETHER	ALL = MOL × F	3.4	
23	541-73-1	1.3-DICHLOROBENZENE		2. 2	
4	106-46-7	1,4-DICHLOROBENZENE		2.0	
5	95-50-1	1,2-DICHLOROBENZENE		2.0	
6	108-60-1	BIS(2-CHLOROISOPROPYL) ETHER		2.7	
7	67-72-1	HEXACHLOROETHANE		2. 1	
8	621-64-7	N-NITROSODI-N-PROPYLAMINE		3.6	
10	98-95-3	NITROBENZENE		2. 9	
11	78-59-1	ISOPHORONE		3.6	
13	111-91-1	BIS(2-CHLOROETHOXY) METHANE		3. 4	
14	120-82-1	1, 2, 4-TRICHLOROBENZENE		2.3	
16	91-20-3	NAPHTHALENE		2. 3	
17	87-68-3	HEXACHLOROBUTADIENE		2.3	
18	77-47-4	HEXACHLOROPENTADIENE		2. 1	
19	91-58-7	2-CHLORONAPHTHALENE		2.3	
20	208-96-8	ACENAPHTHYLENE		1. 9	
21	131-11-3	DIMETHYL PHTHALATE		4.6	
22 :	606-20-2	2,4-DINITROTOLUENE	1	2.6	
23	83-32-9	ACENAPHTHENE		1.8	
24	121-14-2	2,4-DINITROTOLUENE		2. 2	
25	86-73-7	FLUGRENE		1.7	
26	84-66-2	DIETHYL PHTHALATE	1-	4. 0	
	7000-72-3	4-CHLOROPHENYL PHENYL ETHER		2.1	
28	86-30-6	N-NITROSODIPHENYL AMINE		3. 4	
29	101-55-3	4-BROMOPHENYL PHENYL ETHER		1.8	
30	118-74-1	HEXACHLOROBENZENE		4. 0	
31	85-01-8	PHENANTHRENE		2.0	ì
35	120-12-7	ANTHRACENE		1.6	
33	84-74-2	DI-N-BUTYL PHTHALATE		2.6	
34	206-44-2	FLUORANTHENE		2.3	
35	129-00-0	PYRENE		2.5	
36	85-68-7	BENZYLBUTYL PHTHALATE		1. 9	. ,
37	56-55-3	BENZO(A)ANTHRACENE		2. 3	
38	218-01-9	CHRYSENE		2.5	
39	117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE		1.9	
40	117-84-0	DI-N-OCTYL PHTHALATE		2. 0	
41	207-08-9	BENZO(K)FLUORANTHENE		2.5	
42	205-99-2	BENZO(B)FLUGRANTHENE		2.7	
43	50-32-8	BENZO(A)PYRENE	 	2.4	
44	193-39-5	INDENO(1,2,3-CD)PYRENE		2.7	· Zin was
45	53-70-3	DIBENZO(A, H) ANTHRACENE		3.0	
46	191-24-2	BENZO(G, H, I)PERYLENE		2. 9	
48	108-95-2	PHENOL		1.3	
49	95-57-8	2-CHLOROPHENOL		2.7	
51	85-75- 5	2-NITROPHENOL		2.8	
52	105-67-9	2,4-DIMETHYLPHENOL	(_	2. 4	
53	120-83-2	2,4-DICHLOROPHENOL		3.0	4
54	59-50-7	4-CHLORO-3-METHYLPHENOL		13. 1	
55	88-07-2	2,4,6-TRICHLOROPHENOL		8. 4	
56	51-28-5	2,4-DINITROPHENOL		6.3	
57	100-02-7	4-NITROPHENCL		4.8	
58	534-52-1	2-METHYL-4, 6-DINITROPHENOL		11.7	
59	87-86-5	PENTACHLOROPHENOL		11.0	
				,	
					

OHIO EPA * GC/MS ANALYSES REPORT * BASE-NEUTRAL AND ACID EXTRACTABLES

INFORMATION FOR NON PRIORITY POLLUTANTS FOUND IN THE SAMPLE: 1211X1072 MATCH BETWEEN MASS SPECTRA OF UNKNOWN AND OF NBS LIBRARY IS AT LEAST 50% BY PURITY AND 85% BY FIT.

Code/Entry:

Name

Ret Time B Pk Area MW Formula CAS-Number (UP#1,UP#2) Mass/Intensity Pairs

NB 5175: CYCLOOCTANE, ETHENYL-

41

138 C10. H18

61142-41-4

(27, 373)(39, 494)(41,1000)

Copy 1 - Paul B. 12-18-87 DIVISION OF WASTEWATER POLLUTION CONTROL

Report - Chemistry Laboratory

te Received					Laboratory Number		069	<u> 26</u>		_	
Date Reported	8 7-12-15				Approved By:		_sc, □□			\Box ,	
•	1.1.4	10 .1	Flusk	+		Sample Type: Gral	,	omposite <i>≱</i> ≤	- — — 키		
Station Whitz Com	Zaraus	Compliance V				Sample Type. Grai					
	Sample Type Monthly ☐ Compliance ☑ Litigation ☐ WQPA Survey ☐ Complaint ☐ BWQ Survey ☐								H	$H_{\mathbb{Z}}$	1 M
Sample Collected By 3. Schwertz 13. m. 65 65 C			ں y ∟ مم	Date & Time Begin	- السالين	116		===			
	••					of Sample End	ے سے سے				ַן
Report Analysis To _ CO _ NEDO _ NWDO [SEDOI	SWDO	CDO [1 WO	PA [7]	Frequency & Duration	of Compo	site Sampl	e 4xhi	<u> </u>	<u> 33</u> +:
GO HILDO HILDO	2 02001		1	1		· ,	'	<u>'</u>		<u> </u>	
		(0	i ii	<u>_</u>				.	Ω	_	_
<i>(1</i>	ΈΤ	ורדנ	, XZI	.×S	물		ET .	LT3	.YZI	.ys.	[달]
DAD AMETED~	STORET	RESULTS	DATE ANALYZED	ANALYST	METHOD CODE		STORET CODE	RESULTS	DATE ANALYZED	ANALYST	METHOD CODE
PARAMETERS	တ်လ	<u>E</u>	۵₹	⋖	Σŏ	NON-METALS		<u> </u>	۵٩	₹	ΣÖ
FIELD						☐ Acidity, Total CaCO₃ mg/l	P70508,				<u> </u>
MEASUREMENTS			<u> </u>	_	<u></u>	☐ Alkalinity, Total CaCO₃ mg/l	P410,			_ ′	ļ
☐ Chlorine, Free Avl., mg/l	P50064,		<u></u>			☐ BOD, 5-day, mg/l	P310,	,			<u> </u>
☐ Chlorine, Total Resd., mg/l	P50060,	·				☐ cBOD, 5 Day, mg/l	P80082,	,			—
☐ Conductivity, umhos/cm	P94,	•	ļ			☐ BOD, 20 Day, mg/l	P324,	<u>'</u>			—
☐ Dissolved Oxygen, mg/l	P299,	,	ļ	ļ		☐ cBOD, 20 Day, mg/l	P80087,	•			ļ
☐ Flow, CFS	P61,		<u> </u>	ļ		☐ MBAS, mg/l	P38260,	,		ļ	-
定pH,SU 416	P400,		11-17	10.31	ļ	☐ Carbon, Total Org., mg/l	P680,	,			├
™ Temperature, Water, °C	P10,	28.7	4-17.	236		□ COD, mg/l	P335, P940,	,	<u> </u>	 	}—
Gage Height, ft.	P65,		ļ	<u> </u>	ļ	☐ Chloride, CI, mg/I☐ Conductivity at 25°C,	F 94U,	•		ļ	├
		,	ļ	1	<u> </u>	umhos/cm	P95,	,			ł .
		,	├ ──	<u> </u>		☐ Cyanide, Total, mg/l	P720,	,			
TIMETALS				ļ	ļ	☐ Fluoride, F, mg/l	P951,	,			
Aluminum, Total Al, ug/l	P1105,	< 200.	12 14	13,8		☐ Hardness, Total as CaCo₃					
Arsenic, Total As.ug/l	P1002,					mg/l	P900,	,	<u> </u>	<u> </u>	↓
☐ Barium, Total Ba, ug/l	P1007,					☐ Nitrate-Nitrite, as N, mg/l	P620,	,	<u> </u>	ļ	ļ
☑ Cadmium, Total Cd, ug/l	P1027,	40.2	11-30	55	ļ	☐ Nitrite, as N, mg/l	P615,				ļ
☐ Calcium, Total Ca, mg/l	P916,		ļ		ļ		P610,				
Chromium, Hex Cr, ug/l	P1032,	74.55	ļ.,,	. 9 2		☐ Nitrogen, Total Kjeldahl,	,			l	
. ☆ Chromium, Total Cr, ug/l	P1034,		11-24		<u> </u>	mg/l	P625,				<u> </u>
Copper, Total Cu, ug/l	P1042, P1046,	216 ·	17.24	つと	-	☑ Oil and Grease, mg/l GrA		21.8	11/25	ć∧	ļ
☐ Iron, Diss, Fe, ug/l	P1046,	3400	11. 34	10.00		☐ pH, SU	P403,	,		ļ	<u> </u>
√☑ Iron, Total Fe, ug/l	P1043,	2400. 3.	12.3			Phenolics, ug/l	P32730,	,		ļ }	<u> </u>
☐ Magnesium, Total Mg, mg/l	P927,	<u> </u>	1/04:5	7	-	Phosphorus, Diss. P, mg/l	P666,				<u> </u>
☐ Manganese, Total Mn, ug/l	P1055,	· · · · · ·	 			☐ Phosphorus, Total P, mg/l	P665,				<u> </u>
☐ Mercury, Total Hg, ug/l	P71900,	'	 		l	Residue, Total, mg/l	P550,	1		<u> </u>	
Nickel, Total Ni, ug/l	P1067,	1900	424	56		☐ Residue, Total Fit, mg/l	P70300,	, m	11.62	2.4	
☐ Potassium, Total K, mg/l	P937,		17.57	S-21.		☐ Silica, Dissolved, mg/l	P530, P955,	87	1/20	OM	├
☐ Selenium, Total Se, ug/l	P1147,					☐ Sulfate, SO₄, mg/l	P945,	<u>'</u>	 		├
- Silver, Total Ag, ug/l	P1077,	NI/A				□ Sunate, SO ₄ , riig/i	1 343,	,	 		
☐ Sodium, Total Na, mg/l	P929,	, , ,	1						 	 	├─-
☐ Strontium, Total Sr, ug/l	P 1082,					MICROBIOLOGY		,		_	$\vdash \neg$
√ Zinc, Total Zn, ug/l	P1092,	110 .	11:24	BK					-	<u> </u>	╁ぱ
	,	,				☐ Fecal Coliform, MF, #/100 ml	P31616.	,	ł		1
<u></u>			·			☐ Fecal Strep, MF # / 100 ml	P31679,				
mments: 10	566 5	7 1 1						,			\Box
mments: (S/G/AS)	773	1. 72.6				PRESERVATIVES	190.	:1			
	in harri					□ NaOH · □ K₂Cr₂O ₇	™ N/P	DISTRIBUTION: WHIT	TE-LAB EN-PERMIT	e	
	19 13 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	a Constant	•		23	#¶ H₂SO₄		CAN	ARY-STORE		
OEPA 4700 💩 😂 🔭 4						•		GOL	-DISTRICT DENROD-DI	STRICT	
						0:1 found Fr	3,50 14	$3 + H_z S$	Öψ		